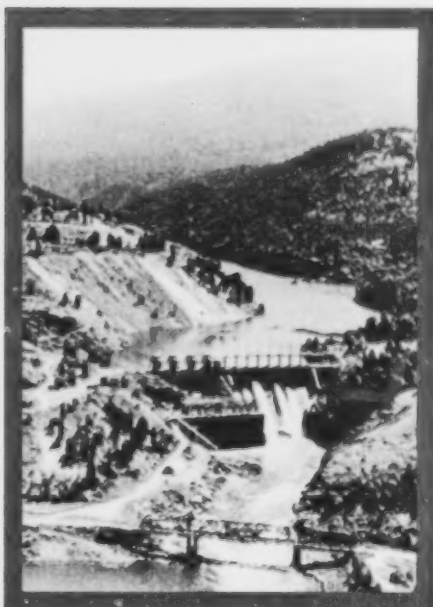


Guide
for
WATERPOWER
PROJECTS



*Land and Water
British Columbia Inc.*
A corporation of the government of British Columbia

COVER PHOTOS:

Upper right:

Falls on Akolkolex River near Revelstoke, British Columbia

Lower right:

Penstock for Sechelt Creek Waterpower Project on the Salmon Inlet,
British Columbia

Lower left:

Intake for Sechelt Creek Waterpower Project on the Salmon Inlet,
British Columbia

Above photos from files of Water Management Branch, Land and Water
British Columbia Inc.

Upper left:

Waterpower Project on the Pend d' Oreille River near the Canada –
USA border on the Columbia River, British Columbia

Photo courtesy of Teck Cominco Metals Ltd., Trail, British Columbia

Guide
for
**WATERPOWER
PROJECTS**

March 2003

ACKNOWLEDGMENTS

Land and Water British Columbia Inc. wishes to thank all those who commented on the draft Guide, including proponents for waterpower projects.

The notion of this document began almost fifteen years ago with the first request by BC Hydro to independent power producers for proposals to construct waterpower projects. While the details of a review of a project may change with time, the fundamentals remain the same. The challenge is always to be clear and comprehensive at once. The persistence of Richard Penner and Michelle Porter of Land and Water British Columbia Inc. in the preparation of the Guide and Donna Moreau of DoMo Communications for designing the document is appreciated.

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Forms and Supplementary Information

The forms and specific information for filing an application for a water licence and Crown land tenure are available on the Internet at

http://lwbc.bc.ca/applying_for_land/waterpower.htm

or from the Land and Water BC Inc. Service Centers. Forms and information should be used in conjunction with this Guide.



PREAMBLE

Land and Water British Columbia Inc. is the government agency responsible for allocating Crown land and water for the benefit of British Columbians.

The environmentally-sound development of Crown land and water resources presents a significant opportunity for the Province to stimulate and diversify the economies of B.C.'s rural and coastal communities. In order to do that, LWBC focuses on sectors that have the most potential to achieve these goals, and waterpower projects have such potential.

A waterpower project requires a water licence under the *Water Act*, and tenure under the *Land Act* for any component of the project situated on Crown land. As part of LWBC's commitment to accelerate economic development in key sectors, the corporation is committed to reducing the regulatory burden and providing clients with a more streamlined process. Applications for a waterpower project will be processed through "one window" with the water licence and Crown land tenure applications adjudicated concurrently.

This guide is a framework for the information a proponent will need to provide in order to facilitate an application. A key part of any application for a waterpower project will be to assess its impacts. Projects that have wide-ranging impacts will require the involvement of many agencies in the process. LWBC will ask for input during the review of the project to ensure decisions are balanced. Agencies consulted could be communities and the general public; non-government organizations; and people already holding rights under the *Water Act* and *Land Act* that may be affected by the project. Aboriginal rights and title will be assessed in accordance with the *Provincial Policy for Consultation with First Nations (2002)*. Simpler projects may require only that the proponent work under the direction of LWBC to address general concerns about the project.

LWBC's commitment is to produce balanced decisions on applications through a transparent and fair process and reach that decision in a timely manner.

OVERVIEW OF PROCESS

Definitions for residential, commercial and general categories are in section 15 of the Water Regulation.

The process for bringing a waterpower project into production consists of ten steps. *STEPs 1 to 7* set out the requirements for the submission, review and adjudication of an application. The requirements for the construction, start of operation and monitoring of the project are described in *STEPs 8, 9 and 10*.

This Guide is applicable to run-of-the-river projects as well as storage-supported projects. If the electricity from the project will be used in the commercial and general categories, the projects will be reviewed according to this Guide. Projects for the generation of electricity in the residential category are not captured.

OVERVIEW OF STEPS 1 – 10

STEP 1 – Submission of Application

A checklist for the information to be provided by the proponent is in Appendix A. The information should include the following:

- ▲ completed application forms for Crown land tenures and a water licence;
- ▲ maps and plans of the project;
- ▲ title certificates and legal plans;
- ▲ preliminary project definition;
- ▲ certificate of incorporation; and
- ▲ application fees.

STEP 2 – Review of Application by LWBC

This step is internal to LWBC, which will review the application for completeness. The proponent will be notified by LWBC if the application is complete, and the schedule for constructing the project will be discussed with the proponent. The schedule for completing the project will be discussed with the proponent.

Incomplete applications will be returned to the proponent with an explanation of the deficiencies.

STEP 3 – Preparation of Development Plan

The proponent is responsible for completing the Waterpower Project Development Plan, comprising the Project Definition and Impact Assessment. A template for the preparation of a Development Plan is in Appendix D.

STEP 4 – Review of Development Plan by LWBC

At this step LWBC will review the Development Plan for completeness. This will ensure that the best information will be made available for review under *STEP 5*.

If the information is incomplete, LWBC will discuss the deficiencies with the proponent for correction.

OVERVIEW OF PROCESS

STEP 5 – Project Review

LWBC will ask local, provincial and federal government agencies, as well as non-government organizations and the general public for input on the project as appropriate. Persons whose water rights or land tenures may be affected by the project will be notified.

Aboriginal rights and title will be assessed in accordance with the *Provincial Policy for Consultation with First Nations (2002)*, and reasonable opportunities will be identified to accommodate aboriginal interests, mitigate infringement or negotiate a resolution.

STEP 6 – Preparation of Summary Report

The proponent will prepare the Summary Report, which condenses the Development Plan and states the conclusions on the assessment of the impacts made in *STEP 5*.

STEP 7 – Decision on Application

LWBC will review all information related to the waterpower project, and make a decision to grant or refuse the application under the *Water Act* and *Land Act*.

If the application is granted, the proponent will be offered tenure to the Crown land and provided a draft water licence. When the proponent accepts the offer, the land tenure and water licence will be signed and issued by LWBC.

STEP 8 – Construction of Project

The water licence will include conditions that require the licensee to submit criteria for the design of the project and plans for its construction. The licensee may be required to retain an independent engineer and an environmental monitor who will provide information and reports to LWBC. The information and reports will be used by LWBC to ensure that the construction is acceptable.

STEP 9 – Operation of Project

The parameters and procedures for the operation of the project will be in a report prepared by the licensee and submitted to LWBC, which will review and issue directions for the commencement of the operation of the project.

STEP 10 – Monitoring of Project

The proponent will be required to submit information on the quantity of electricity generated by the project and other information on the compliance with the water licence and land tenures.

Sometimes the proponent may be required to implement a monitoring program to confirm that a particular impact has been satisfactorily addressed.

OTHER LEGISLATIVE REQUIREMENTS

The proponent's investigation of a waterpower project should consider the requirements of all legislation in the context of the diversion of water and use of Crown land. Some of these requirements are discussed below.

Further information is available from the Environmental Assessment Office, or their internet site as follows:

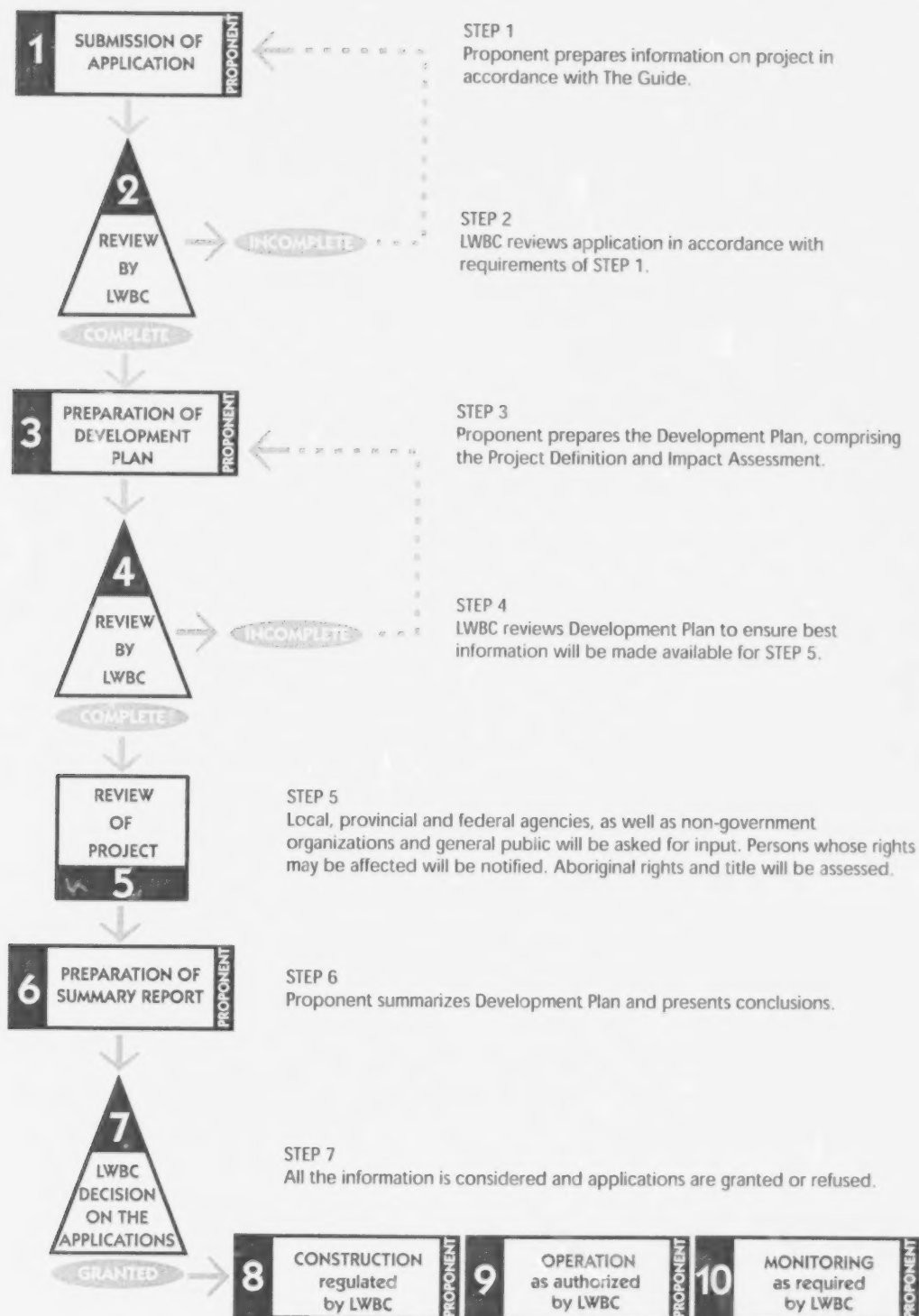
<http://www.eao.gov.bc.ca/>

Information on community watersheds is available from the Ministry of Sustainable Resource Management or their internet site as follows:

<http://srmwww.gov.bc.ca/wat/cws/cwshome.htm>

- ▲ A waterpower project that has a capacity greater than the threshold set for energy projects under the *Reviewable Projects Regulation*, or those otherwise designated by the Minister, is reviewable under the *Environmental Assessment Act (EAA)*. If a project is approved under the EAA, any licencing under the *Water Act* and *Land Act* is provided by LWBC.
- ▲ The *Water Protection Act* and the *Fish Protection Act* include provisions that may affect some projects.
- ▲ Reserves established under the *Water Act* and *Land Act* may affect the development of a waterpower project on certain streams and tracts of Crown land. Information on such reserves is available from LWBC.
- ▲ The stream for a waterpower project may be classified as a "community watershed" under the *Forest Practices Code of British Columbia Act* and this may impose conditions on the construction of the project.
- ▲ Ministry of Sustainable Resource Management should be contacted regarding land and resource plans for the area encompassing the stream on which the waterpower project is situated.
- ▲ Local government may require that the land required for the waterpower project be rezoned before the project can be constructed. When the review of an application is initiated, if rezoning is required, LWBC and local government should discuss the appropriate point in the LWBC process at which the applicant should formally initiate the rezoning process.
- ▲ The federal *Fisheries Act* and the *Navigable Water Protection Act* may require decisions that will initiate a review of the project under the *Canadian Environmental Assessment Act*. Such a review will be coordinated as much as possible with the review described in this Guide.

STEPS OF THE PROCESS



STEP 1 SUBMISSION OF APPLICATION

Combining STEPS 1 & 3

The minimum requirement for the submission of an application does not include an assessment of the impacts of the project. The studies that provide the information to assess the impacts are expensive and may take more than a year to complete. The assessment is usually completed as part of the preparation of the Development Plan under STEP 3, which gives the proponent the security of an application filed with LWBC while gathering additional information on the project.

For projects that do not have extensive impacts, the proponent may choose to complete the Development Plan and submit it in place of the Preliminary Project Definition. In this case, the submission will move to STEP 4 only if it first satisfies STEP 2.

The Application Package is also available on the following internet site:
http://www.lwbc.bc.ca/water/app_package/

The submission of an application for a waterpower project is the proponent's opportunity to officially provide LWBC with information required under the *Water Act* and *Land Act*. Most applications will require the proponent to work with qualified professionals to ensure that the information in the submission is complete and to the satisfaction of LWBC.

INFORMATION REQUIREMENTS

An application for a waterpower project must include the following information:

- ▲ completed application forms for Crown land tenures and a water licence;
- ▲ maps and plans of the project;
- ▲ title certificates and legal plans;
- ▲ preliminary project definition;
- ▲ certificate of incorporation; and
- ▲ application fees.

Application Forms

An Application Package that includes forms and directions for completing an application for a water licence and Crown land tenure is available from any LWBC office. The locations of these offices are listed in Appendix C.

The Application Package should be used to complement this Guide, however the directions in this Guide prevail over the instructions in the package. Some differences between the package and this Guide are worth noting and are as follows:

- ▲ The checklist in Appendix A of this Guide must be used in addition to the checklist in the package.
- ▲ The Drawing Standards in the package are also applicable to submissions for waterpower projects except as amended in this Guide.
- ▲ The package requires the preparation of a "Water Development Plan", which requirement is separated in this Guide into two parts:
 - The first part is the Preliminary Project Definition, which is discussed further along in *STEP 1*.
 - The second part is the preparation of the Waterpower Project Development Plan, which is discussed in *STEP 3*. A template for the Development Plan is in Appendix D.

STEP 1

Forms and schedules required

Schedule 2 should be completed if a licence for storage purpose is required.

The forms from the Application Package to be included with the submission are as follows:

- ▲ Application form for Crown Land and Water Licence,
- ▲ Appendix A – Application for Crown Land – *Land Act*,
- ▲ Appendix B – Application for Water Licence – *Water Act*,
- ▲ Economic Benefits Questionnaire for Development of Crown Land and Water,
- ▲ Schedule 2 – Dam & Reservoir Information,
- ▲ Schedule 3 – Power Information.

Maps and Plans of the Project

Maps and plans are a highly effective tool for presenting information on certain aspects of a project. Standards to ensure the best use of this tool are included in the Application Package discussed above. These standards are included in Appendix B, and are applicable to a waterpower project. The maps and plans to be submitted are discussed below.

General Location Map

The general location of the project should be shown on a map at a scale of 1:250000 to 1:50000. This map indicates the location of the project in British Columbia, nearby towns and communities, and public transportation routes that lead to the vicinity of the project. The location of the project should be indicated by a pointer.

Topographic Map

The topographic map shows the physical features of the area in which the project is to be constructed. The scale of the map should be between 1:50000 to 1:20000. Preferred size of the map is 11x17 or smaller, and more than one sheet may be used. However, the size and number of the sheets should be adjusted to best show the required information, which is as follows:

- ▲ all streams and tributaries that will be affected by the project;
- ▲ all points of diversion including intakes and dams;
- ▲ the boundaries of the watershed above all points of diversion;
- ▲ the sites of all dams for the storage of water;
- ▲ the components of the project including the following:
 - water conveyance structures such as canals, tunnels, pipelines, and penstock;
 - powerhouse and switchyard;
 - transmission line from the switchyard to point on the provincial power grid, connection with a utilities distribution system, or place of use;

STEP 1

- All existing roads and trails in the vicinity of the project and access roads to be constructed.
- Sites related to the construction and operation of the project, which may include offices, housing for workers, vehicle parking, lay down areas, and gravel removal areas.

The information on the topographic map may be shown schematically with a legend to distinguish elements. The direction to North should be shown. A title block should indicate who prepared the map and the source of the information.

Plans of the Works

The plans of the works should be at a scale between 1:20000 and 1:5000. The preferred size for these plans is 11x17 and more than one sheet may be used.

All the components of the project shown on the topographic map are to be shown in greater detail on the plans of the works. The detail should reflect the investigation completed by the proponent in conjunction with qualified professionals. The plans of the works should include the following:

- ▲ The general arrangement of the intake, and water conveyance structures such as tunnels, pipelines and penstock.
- ▲ Typical cross section and profile of the dams proposed for the storage of water, the type of spillway, and the materials to be used in the construction of the dam.
- ▲ The total and active volumes of the storage reservoirs.
- ▲ The areas above the natural boundaries of the stream to be flooded by any of the structures.
- ▲ The configuration of the powerhouse, the tailrace channel and the switchyard.
- ▲ The areas required for staging construction and excavation of materials to be used in the construction of the works.
- ▲ The areas required for the temporary and permanent buildings related to the construction and operation of the works, including sites for communication equipment.
- ▲ The active and inactive roads and trails in the vicinity of the project, access roads to be constructed, and parts of active and inactive roads to be improved.
- ▲ The route and size of the transmission line, and the manner of construction, e.g. buried, wooden pole.
- ▲ The boundaries of all parcels of private and Crown land in the vicinity of all the works.

STEP 1

Crown land needed for project

The Crown land application area containing the project improvements should be indicated with a polygon-shape outlined in red with dimensions (metres) and area (hectares). The boundary of the polygon-shaped application area should be:

- ▲ generous enough to accommodate changes required in the transition from the conceptual arrangement of the works to their final design; but
- ▲ specific enough to include only the lands reasonably required for the project.

Title Certificates and Legal Plans

All parcels of land on which the project will be built must be identified with the following documents, which are to be included with the submission of the application.

- ▲ The State of Title Certificates from the Land Title Office.
- ▲ The survey plans and charges described in the titles.

A legal description of all adjacent lands that will be affected by the project is to be provided.

Preliminary Project Definition

The preliminary project definition is a concise description of the scope of the project and should include the following:

- ▲ executive summary;
- ▲ proponent identification;
- ▲ project description;
- ▲ capacity of project;
- ▲ linkages with other projects;
- ▲ market for electricity from project; and
- ▲ schedule for completion of project.

Executive Summary – The summary should be one page or less.

Proponent Identification – This section should expand the information on the first page of the application form. The company name and incorporation number are to be provided along with a description of corporate structure in terms of the people who will be involved in the review of the project. Consultants that have been retained by the proponent to assist in the review should also be identified. The person who is to be contacted for any additional information and meetings must be identified.

Identify a contact person

Project Description – The description of all the characteristics and location of each component of the project should complement the maps and plans in the submission of the application. Directions for accessing the site of each component are to be provided.

STEP 1

Investigation and data

The physical features of all Crown land needed for each component of the project should be described. Ground and air photographs of the proposed sites are very helpful for understanding the project.

The status of active and inactive roads to be used to access the components of the project should be described. Indicate the extent of any construction required to upgrade existing roads. Describe the new roads to be constructed.

Trails in the vicinity of the project should be described.

Describe the route of the transmission line from the switchyard to the provincial grid or place of use if the power is to be used by the proponent or a person that is not a utility.

If the connection of the transmission line is to the provincial grid, indicate if a substation will need to be constructed or upgraded.

Capacity of Project – Indicate the arrangement of turbines and generators and the maximum power capacity of each unit. The maximum quantity of water to be diverted by the units should be described. An estimate of the maximum and average annual generation of electricity, and monthly distribution of average annual generation of electricity should be provided.

The extent of the investigation and quantity of data on which the project is based should be described. For example, is the availability of water based on long-term records on the stream, or a cursory analysis of a few years of stream flow measurements on a nearby stream? Projects with insufficient data will be more difficult to assess.

The data does not need to be included with the Preliminary Project Definition; however, it will be required with the Development Plan submitted in *STEP 3*.

Linkages with Other Projects – Describe any components that the project has in common with other projects, e.g. access roads, transmission lines, substation for connection to provincial grid, etc. The other projects may be in operation, or proposed in an application submitted to LWBC.

Market for Electricity from Project – The proposed market for the electricity should be described, e.g. for sale to BC Hydro, for use by owner in the extraction or processing of natural resources, for export, for distribution to end user, etc.

This information will help determine the category of power use for fees and rentals and the interests of other agencies, such as the BC Utilities Commission. The proponent should indicate whether an energy purchase agreement is under negotiation, and the stage of those negotiations.

To obtain BC Hydro contact numbers and the green criteria see:
<http://www.bchydro.com>

For answers to general BC Hydro IPP (Waterpower) questions e-mail:
green.ipp@bchydro.com

STEP 1

Schedule for Completion of Project – A schedule for the review and construction of the project must be provided. This schedule is the proponent's estimate of the time required to complete *STEP 3* to *STEP 8*, inclusive. The estimate should include time for obtaining other permits and approvals for the construction of the project.

Certificate of Incorporation

If the proponent is a company, a copy of the certificate of incorporation must be submitted.

Application Fees

The fee for an application for a water licence and a Crown land tenure must be paid at the time the application is submitted. Separate cheques or money orders are required for a Crown land tenure and a water licence. Cheques or money orders are to be made payable to Land and Water British Columbia Inc.

Application Package has fee schedules.

STEP 2

REVIEW OF APPLICATION BY LWBC

Complete application is required

Information submitted by a proponent for a waterpower project will be reviewed by LWBC in relation to the requirements set out in *STEP 1*.

If LWBC deems the application to be complete, the applicant will be notified in writing and LWBC will discuss with the proponent the schedule for completing the project. The proponent will be provided with the name of the contact person in LWBC.

Not a decision

Notification by LWBC that an application is complete is not an indication that the application will be either refused or granted in *STEP 7*.

Incomplete application will be returned

An incomplete application will be returned and the proponent will be informed of the deficiencies to be corrected before re-submitting the application.

STEP 3 PREPARATION OF DEVELOPMENT PLAN

Combining STEPS 1 & 3

The studies that provide the information to assess the impacts of the project are expensive and may take more than a year to complete. The preparation of the Development Plan in a separate STEP gives the proponent the security of an application filed with LWBC while gathering additional information on the project. However, the proponent may choose to combine this STEP with STEP 1.

Discussion with other parties

Information provided by other parties at this STEP may be preliminary.

The purpose of the Development Plan prepared by the proponent is to provide LWBC with the information that fully defines the project and identifies the impacts from the construction and operation of the project. This information forms the basis for the adjudication of the applications under the *Water Act* and *Land Act*.

Appendix D indicates the type of information to be provided in the Development Plan and a template for its preparation.

The Development Plan consists of two sections: the Project Definition and the Impact Assessment.

Project Definition

The first section of the Development Plan provides the definition of the project in terms of location and physical characteristics. The general arrangement of the project should not be significantly different than indicated in the Preliminary Project Definition submitted in *STEP 1*. The capacity of the project and the quantity of water to be diverted can be increased if supported by additional information, e.g. a better analysis of the availability of water. Also, the location of the works, e.g. the alignment of the penstock, can be adjusted provided that the location remains within the area of Crown land indicated in the application submitted under *STEP 1*.

A Project Definition that substantially changes the project as described in the Preliminary Project Definition provided in the application may require the proponent to return to *STEP 1 – Submission of Application* and submit a new application.

Impact Assessment

The second section of the Development Plan is the Impact Assessment. This section of the report should identify all impacts of the construction and operation of the project.

During the preparation of the second section, the proponent may wish to contact other parties regarding the impacts of the project. At this step of the process, the other parties may provide specific information in their possession or provide general advice regarding their interest.

LWBC recognizes that any information provided by other parties during *STEP 3* is to help the proponent prepare a complete Development Plan. LWBC also recognizes that the information may be provided without a full appreciation of the extent of the project. Under *STEP 5* the other parties will have an opportunity to provide input that reflects their interest in the context of a fully defined project. Other parties that may be interested in the project are discussed on the following page.

STEP 3

LWBC may attend initial meeting.

Agencies – Appendix F provides information about agencies that may have a mandate that will affect the construction and operation of a waterpower project. Some of these agencies may have standards or guidelines that could assist the proponent in the preparation of the Development Plan.

First Nations – The proponent may also wish to enter into discussion with First Nations whose traditional territory encompasses the project. The proponent should advise LWBC if meetings are arranged with First Nations. Depending on the nature of the project, LWBC may want to attend the initial meeting.

Interested Parties – Some projects may impinge on the use by others of the stream and the land affected by the project. Such persons could include licensees under the *Water Act*, riparian owners, private landowners, and holders of tenure to Crown land. Various special interest groups may also be a source of information regarding the potential impacts of the project.

Public Consultation – The Development Plan should identify any issue that requires public consultation and include a communication plan for such a consultation.

For many projects public consultation may not be appropriate at *STEP 3*. If matters are identified at this STEP that indicate public consultation is appropriate, the proponent should prepare a communication plan and discuss with LWBC before proceeding.

Discussions to be documented.

All discussions with other parties during the preparation of the Development Plan should be documented by the proponent. The documentation does not need to be submitted with the Development Plan, but it should be retained by the proponent.

An impact that requires extensive data for evaluation should be discussed with LWBC for direction before proceeding. LWBC may be able to coordinate the development of terms of reference for the data collection that satisfies the interested agency.

Alternatively, LWBC may agree to the submission of the Development Plan with draft terms of reference for completing the assessment of some impacts, where the proponent can show input from others will expedite the review of the project. This may be appropriate for projects with extensive impacts that overlap into the jurisdiction of more than one agency, or the impacts are of public interest.

The draft terms of reference prepared by the proponent will be finalised with input from agencies in *STEP 5 – Project Review*, and this is discussed further in this STEP.

STEP 3

A complex Development Plan should be discussed with LWBC before completing.

For projects that have extensive mitigation and compensation measures, the proponent may want to review a draft Development Plan with LWBC to ensure that it provides the information necessary to address issues specific to the *Water Act* and the *Land Act* and the information for assessing the impacts is complete.

When the proponent has reasonably defined the project and has collected sufficient information to reasonably assess the impacts from the construction and operation of the waterpower project, the Development Plan may be submitted to LWBC.

STEP 4 REVIEW OF DEVELOPMENT PLAN BY LWBC

The Development Plan will be reviewed by LWBC for completeness.

Not a decision

The Project Definition section has to have sufficient information to determine the basic conditions for the water licence and land tenure that may be issued for the project. The Impact Assessment section will be reviewed to ensure that the information for assessing impacts is reasonably complete.

This review is not a determination of the adequacy of the mitigation and compensation proposals, nor is it a decision about the granting of the applications under the *Water Act* and *Land Act*.

The review by LWBC at *STEP 4* will ensure that the best information will be made available to other parties for input under *STEP 5 – Review of Project*.

When LWBC is satisfied that the Development Plan is complete, the proponent will be notified in writing of the next step.

If the information in the Development Plan is not satisfactory to LWBC, the deficiencies will be discussed with the proponent for correction.

STEP 5 REVIEW OF PROJECT

LWBC receives input from agencies, interested parties, the public and First Nations.

The review of the project under *STEP 5* gives agencies, interested parties, the public and First Nations an opportunity to provide LWBC with information to determine the following:

- ▲ the impacts of the project and the appropriate mitigation and compensation measures to address the impacts;
- ▲ the potential effect of the project on the rights people may have under the *Water Act* and *Land Act*; and
- ▲ the potential for infringement on aboriginal rights or title over land and water resources.

PROCESS FOR REVIEW

The mechanisms for seeking input from agencies and the public on impacts, determining the effect on rights and identifying the potential infringement on First Nations are each different. Furthermore, the use of any of these mechanisms may be different from one project to another.

Below is a discussion of various mechanisms available to LWBC to complete the review of a project. While the review will always begin with the distribution of information, the review may continue with several mechanisms in parallel. For example, the working committees may be resolving some issues, and at the same time the proponent may work directly with an interested party to resolve another. While this is taking place the proponent may also be sponsoring an Open House. LWBC will use all appropriate mechanisms to define the process best suited for a particular project, and discussion of the various mechanisms follows.

Several review mechanisms may be used in parallel.

Start of Review

The review of the project will always begin with the distribution of the information completed to the satisfaction of LWBC under *STEPs 2 and 4*. The information will be distributed to agencies, First Nations and interested parties who will be asked to comment. LWBC will discuss the comments that are provided with the proponent and determine how the review should proceed. LWBC will advise all parties of the process to be followed.

Distribution of information and request for comments.

LWBC determines how to proceed.

General Meeting

Comments that indicate the impacts of the project are extensive may require a general meeting of all interested parties. The parties that received the Development Plan and any other interested parties that are identified from the comments would be invited to attend. LWBC would host the meeting. The proponent would be asked to present the project at the meeting and answer questions. One general meeting should be sufficient for most projects. However, additional general meetings will be held if warranted by the extent and complexity of the impacts.

LWBC hosts meeting.

STEP 5

LWBC establishes and leads small committees to work on specific issues.

LWBC instructs proponent to discuss directly with interested parties.

LWBC selects reviewers.

LWBC sends letter requesting input as well as information from Step 1 to interested parties. Proponent will provide copies of Development Plan as directed by LWBC.

Working Committees

The general meeting may be followed by LWBC establishing small committees that would each work through a specific issue to assess the impact and propose an appropriate mitigation and compensation measure. Committees would only be established if the scope of the impact indicates that discussion and exchange of ideas would expedite the resolution of the matter. LWBC will be the lead on these committees and the proponent would be asked to attend as appropriate. Two or three meetings are expected to be sufficient to fully explore even the most complex issue.

LWBC may proceed directly from the receipt of written comments on the Development Plan to the establishment of small committees. Again, such committees would be established only if the scope of impact requires this forum for a timely resolution.

Direct Resolution

The comments on the information distributed to start the review may indicate to LWBC that the matters can be resolved by the proponent through direct discussions with the interested parties. In this case, LWBC would ask that this discussion proceed.

Selected Reviewers

Generally, the parties who will be asked to provide input to the assessment of the impacts of the project are the agencies identified in Appendix F. These agencies have jurisdiction regarding the public interest in various aspects of the project. However, some parties that have an interest in a specific issue, or have specific expertise in assessing an impact may be selected to provide input to LWBC.

Enclosed with the letter requesting input from interested parties will be the application forms and other information submitted by the proponent at *STEP 1 – Submission of Application*. The letter will also be sent to the proponent, who will be asked to provide each of the selected reviewers with a copy of the Development Plan that is acknowledged by LWBC as complete at the end of *STEP 4*.

Agencies Input

The agencies will be asked to provide input on the assessment of impacts of the project as follows:

- ▲ Does this application impact your agency's legislated responsibilities?
- ▲ Does the Development Plan propose sufficient measures to both mitigate and compensate the impacts for which your agency is responsible?
- ▲ What other, if any, mitigation measures would address your concerns?

STEP 5

LWBC sends letter requesting specific input as well as information from Step 1 to specific interest parties.

- ▲ Is additional information required to fully describe the impacts for which your agency is responsible?
- ▲ Will the proponent require an approval or permit from your agency?
- ▲ Will compliance monitoring be required by your agency?

Parties with Specific Interest

Parties, other than agencies, who have a specific interest in the project will be provided information about the project and asked to provide specific input according to the parties interest. Such parties could include societies with purposes that may be affected by the project.

Public Consultation

The objective of public consultation is to inform the public about the nature of the project and give the public an opportunity to provide information for consideration in the assessment of the impacts of the project.

Open House – A form of public consultation is through an "Open House". The proponent would present information about the project and its impacts at a public location in the vicinity of the project. The public would be invited by the proponent to attend to view the information and get further clarification on matters of interest.

LWBC may attend as an observer.

LWBC and agencies will often attend an Open House as observers. Sometimes LWBC or the agencies will be asked to discuss the process or a specific aspect of the project.

LWBC reviews issues raised at Open House and determines if further action is required.

The proponent will be required to identify the persons that attend and to report to LWBC on the issues raised at the Open House. These issues will be reviewed by LWBC to determine if further public consultation is required.

LWBC usually attends.

Workshop – If there is a narrow public interest on specific matters, the proponent may hold a series of workshops to explore these matters. LWBC and the appropriate agencies would usually attend the workshop. The proponent would report out to LWBC on the workshop.

Inquiry – Occasionally the public interest in values impacted by a project may be so extensive that a formal inquiry into the impacts is necessary for the proper adjudication of the matter. LWBC would provide direction for such an inquiry. Evidence at an inquiry would be given under oath, and witnesses may be cross-examined. Parties may be represented by legal counsel.

STEP 5

LWBC notifies water licensees, riparian owners, and holders of land tenures of proposed project.

LWBC discusses issues with objectors.

LWBC arranges site inspection with proponent.

LWBC sends information to First Nations.

First Nations provides input on impacts.

LWBC asks for input to prepare terms of reference for additional studies.

Rights of People

People who hold water licences or applications for water licences on streams impacted by the project will be provided the information on the project and given the opportunity to indicate the way the project may affect the rights under their licences. Owners of riparian lands on the impacted stream and owners of lands affected by the works of the project will be given the same opportunity.

Holders of tenures under the *Land Act* will also be given an opportunity to indicate how their rights may be affected by the project.

Objections that are filed by people with rights under the *Water Act* and *Land Act* may be given to the proponent for comment and resolution if possible.

LWBC will also discuss the issues with people who file an objection, as the decision on the application for the project must address the objections.

Site Inspection

The review of the project will require an inspection of the site. This will be arranged by LWBC with the proponent and may include other parties with jurisdictional responsibility. Usually the site inspection is made early on in the review of the project, as it provides a context for the comments. Some projects may require more than one inspection.

The proponent may be required to provide transportation to the site.

First Nations

The information sent to First Nations at *STEP 5* initiates the process for LWBC's assessment of First Nations' interests. Aboriginal rights and title will be assessed in accordance with the *Provincial Policy for Consultation with First Nations (2002)*. In accordance with this policy LWBC will identify reasonable opportunities to accommodate aboriginal interests, mitigate infringement or negotiate a resolution.

In addition First Nations will have the opportunity to provide input on the impacts of the project.

Addendum Report

The review of some projects will identify impacts that cannot be assessed on the basis of the information provided by the proponent. The proponent may also have submitted incomplete information on some issues because the collection of the data to assess the impact requires direction from parties with an interest in the project and LWBC.

When the assessment of an impact needs more information, LWBC will ask the parties interested in the impact for input on the preparation of the terms of reference for the additional studies. The

STEP 5

terms of reference will include the collection of data and the analysis of the data to define the impact. The proponent will submit a report on the matter as an addendum to the Development Plan completed to the satisfaction of LWBC in *STEP 4*.

The addendum report will be distributed for comments as described above for the Development Plan.

Closure of Review

The review of the project is closed when LWBC is satisfied that sufficient information is available to address all the impacts associated with the project. Generally this stage is easily determined by the proponent if parties involved in the review indicate that their concerns have been addressed.

LWBC will also consider the review of the project is closed when additional information will not better define an impact or clarify the mitigation and compensation measure for an impact.

A proponent may request a closure from LWBC if an issue cannot be resolved to the satisfaction of the proponent and a party that has an interest in the project.

LWBC determines that concerns have been addressed satisfactorily.

STEP 6

PREPARATION OF SUMMARY REPORT

The information from *STEP 5 – Review of Project* will be compiled by the proponent into a Summary Report. The format for this report will be the same as the template for the Development Plan.

The Summary Report condenses the information in the Development Plan and summarizes the information from the assessment of the impacts in *STEP 5 – Review of Project*. Conclusions on the assessment of impacts and the proposed mitigation and compensation measures should be clearly stated.

The Summary Report should include drawings that show the general arrangement of the components of the project in relation to legal lot boundaries, and the boundaries of Crown land required for the project. The size of these drawings should be 8 1/2x11, 11x14 or 11x17.

The proponent will consult with agencies, interested parties and First Nations in the preparation of the Summary Report to ensure that their perspective is fairly represented. The proponent must indicate in the report if these parties are in agreement with the mitigation and compensation measures identified in the Summary Report.

Occasionally the proponent may be unwilling to accept the mitigation or compensation measure for an impact as proposed in *STEP 5 – Review of Project*. The Summary Report may reflect the mitigation and compensation proposed by the proponent. However the recommendations of the party affected by the impact must be clearly stated.

Drawings need to be included.

Proponent consults with agencies, interested parties and First Nations.

STEP 7 **DECISION ON THE APPLICATIONS**

LWBC will review all the information pertaining to the waterpower project. A Summary Report that indicates the proponent and parties that have an interest in the waterpower project are in agreement on the proposed mitigation and compensation measures will simplify the decision on the application. The proposed mitigation and compensation measures and the impact the project may have on the existing water and land rights will be considered with regard to the authority provided under the *Water Act* and *Land Act*. The potential infringement of aboriginal rights and title over water and land resources must be considered in the decision. A decision to issue a water licence and Crown land tenures for the waterpower project will include the appropriate terms and conditions.

If the proponent and the parties are not in agreement with the mitigation and compensation measures for the impacts of the waterpower project, the decision-maker will need to consider all the information related to the impacts and determine if the application should be granted. A decision to grant the application will include terms and conditions that are appropriate.

GRANTED APPLICATIONS

Crown Land Offer

If LWBC is satisfied that the project should proceed, the proponent will be provided an offer letter with the tenure documents for the Crown land on which the project will be located. The letter will also set out any additional requirements such as security, or liability insurance. If the offer is accepted, the proponent should sign and send the documents with the additional requirements to LWBC, and it will complete the transaction for the use of Crown land by the proponent.

Draft Water Licence

Enclosed with the offer for tenure to the Crown land for the project will be a draft water licence that defines the conditions for the use of water as determined from the review of the project. The proponent will be asked to advise LWBC if there are any factual errors in the licence.

Final Documents

When the proponent returns the signed Crown land offer, LWBC will issue the land tenures and water licence to the proponent.

Notification of Decision

LWBC will notify all interested parties of the decision on the application.

LWBC sends proponent an offer letter.

A draft water licence for a hypothetical waterpower project is in Appendix E.

LWBC issues land tenures and water licence.

LWBC notifies all parties.

STEP 7

Information on the appeal process is available on the internet at:
<http://www.eab.gov.bc.ca/>

Water rentals are set out in the Water Regulation, which can be viewed at:
http://www.qp.gov.bc.ca/statreg/reg/W/Water/204_88.htm

Crown land rental rates for the various project components of the project can be viewed at:
http://wbc.bc.ca/about_bcal/policy/

Appeal to Environmental Appeal Board

The process under the *Land Act* is complete when the tenure is issued for the project.

Under the *Water Act* the person who receives the licence, an owner whose land is physically affected by the project, and a licensee, riparian owner or applicant for a licence have the right to appeal the issuance of the water licence. The appeal is to the Environmental Appeal Board, and must be filed within 30 days of the decision.

Lease, Statutory Right-of-Way

When the project is built, the proponent has the option to survey the improvements and request an LWBC lease or statutory right-of-way that can be registered in the Land Title Office. The proponent may also wish to purchase the powerhouse site, which can be discussed with LWBC staff.

Annual Rentals

Proponents with approved projects will be required to pay an annual rent for the water licence and land tenures.

STEP 8 CONSTRUCTION OF PROJECT

The Engineer	The Engineer under the <i>Water Act</i> (the "Engineer") has the authority to regulate the construction of works, and the proponent may be required to satisfy a number of conditions before construction starts. The water licence for the project will set out these conditions, which may include the following:
Information to be submitted to the Engineer	▲ submit to the satisfaction of the Engineer, the following: • plans that show the general arrangement of the works; • criteria for the design of the works; • criteria for the operation of the works; • a schedule for the construction of the works; and • plans for the construction of the works, which plans are signed and sealed by a professional engineer registered in the province of British Columbia (the "Design Engineer"); ▲ retain a professional engineer registered in the province of British Columbia (the "Construction Engineer") to supervise the construction of the works; ▲ prepare, to the satisfaction of the Engineer, an environmental management plan ("the EMP") for the management and mitigation of construction impacts; ▲ obtain leave to commence construction, in writing, from the Engineer.
The Design Engineer	
The Construction Engineer	
Prepare an EMP	
Leave to commence	

Templates for the documents that set out the information and reports to be provided by the Independent Engineer and the Environmental Monitor are in Appendices G and H.

The Independent Engineer

The Environmental Monitor

Persons to be Retained by Proponent

For some projects, the proponent may be required to retain professional persons who are independent from the proponent. The independent persons may include the following:

- ▲ a professional engineer (the "Independent Engineer") registered in the province of British Columbia who will provide information and reports on the design and construction of the works to the Engineer; and
- ▲ a person with the appropriate professional qualifications to monitor the construction of the works and provide information and reports on the compliance of the construction with the EMP.

Every waterpower project has common elements, but the details of each are unique. Before proceeding with the construction of the works, the proponent should meet with LWBC to discuss the conditions in the water licence and the expectations of any independent persons to be retained by the proponent.

STEP 9 OPERATION OF PROJECT

Simple operating conditions

Conditions may be imposed on the operation of a waterpower project to mitigate its effects. These conditions will be determined during *STEP 5* and, if they are simple, the conditions may be set out in the water licence for the project.

Extensive or complex operating conditions

Operating conditions determined during *STEP 5* that are extensive or complex may need to be implemented through a separate order under the *Water Act* to regulate the diversion, rate of diversion, storage and use of water for a waterpower project. The separation of the directive to operate the facility in a particular way from the licence that sets out the rights of a person to divert and use water has two advantages. First, it provides flexibility to alter the operating conditions if appropriate, and second, it allows the construction of the project to proceed if some additional studies are required to refine the operating conditions.

The process for defining the conditions and authorizing the operation of the works would be set out in the water licence as discussed below.

COMMENCING OPERATION

Before commencing the operation of the works, the licensee would be required to do the following:

Proponent submits report on parameters and procedures for operation.

- ▲ Submit a report for acceptance by the Regional Water Manager under the *Water Act* on the parameters and procedures for the operation of the authorized works. The parameters and procedures must be based on the Summary Report prepared by the proponent in *STEP 6* of this Guide, and on any changes made in the decision by the Regional Water Manager under *STEP 7* to the conclusions on the mitigation and compensation measures proposed in the Summary Report.

Obtain leave to commence.

- ▲ Obtain leave to commence operation, in writing, from the Regional Water Manager under the *Water Act*.

Report briefly describes physical aspects of project, hydrologic conditions and values considered.

The report on the parameters and procedures provides a brief description of the physical aspects of the project, the hydrologic conditions on the stream and values considered in the operation of the facility. The report provides the basis for the order regarding the operation of the facility. This is important if an issue arises many years later regarding the operation of the facility. The report is also a baseline for evaluating any changes that the licensee may propose in the future.

Baseline for evaluating future change.

STEP 9

REGULATION OF WORKS

The authority to regulate the diversion, rate of diversion, storage, and use of water is provided in section 39 of the *Water Act*. This authority is general to the protection of the rights of licensees, riparian owners and landowners affected by the works. The use of this authority to regulate works to protect other values requires a specific clause in the licence that will require the licensee to operate the works in accordance with:

- ▲ Procedures ordered under the *Water Act*, including any order for the regulation of the diversion, rate of diversion, storage and use of water. The licence will specify the values to be protected, for example, fish and fish habitat.
- ▲ Any amendment of the procedures ordered by the Engineer.

The review of the project under *STEP 5* is expected to fully identify all impacts of a project that are to be mitigated through operating measures, and the parameters for such operation. After the procedures have been ordered, any change to the parameters for a particular operation will require the consent of the licensee. The stipulation that the procedures may be amended provides the licensee with flexibility to propose operational changes, provided that the mitigation of impacts is not altered. It also allows LWBC to respond to conditions that affect public safety and events that are not anticipated in the procedures. The authority to amend the procedures does not extend to permanently reducing the right to divert and use water for the purpose set out in the licence.

Proponent has flexibility to propose operational changes and LWBC is able to respond to changing conditions or unforeseen events.

STEP 10 MONITORING OF PROJECT

LWBC determines form for submitting information describing amount of electricity generated and compliance with conditions for mitigating impacts.

Condition to monitor an impact.

The licensee must monitor the operation of the project for the amount of electricity that is generated, and compliance with conditions for mitigating impacts. The form for submitting this information will be determined when the project commences operation. The amount of electricity generated by the facility is used to calculate the annual water rentals. The information provided on compliance of conditions ensures that the licensee and LWBC have the same information for responding to any inquiry.

The licence may contain a condition that requires monitoring of an impact to confirm that the assessment under *STEP 5 – Review of Project* was valid. Such a condition is appropriate where an impact is understood well enough that its impact will not stop the project, but further information is required to fully define the mitigation or compensation of the impact.

The conditions that set up the monitoring program may be as follows:

- ▲ Prepare a monitoring program suitable to determine the impacts on the specific value to be monitored, e.g. fish, wildlife, recreation, etc., which monitoring program has to be accepted by the Regional Water Manager.
- ▲ Implement the monitoring program to the satisfaction of the Regional Water Manager.
- ▲ Continue the program for (a required number) of years following the commencement of operation of the works or to the satisfaction of the Regional Water Manager.
- ▲ On the completion of the monitoring program, prepare a report that identifies the nature of the impact on the specific value and implement the appropriate mitigation and/or compensation to the satisfaction of the Regional Water Manager.

GLOSSARY AND ACRONYMS

Please note: The definitions and explanations provided in this Glossary are only for the clarification of the information in this Guide. If there is a conflict between these definitions and explanations and the *Water Act* and *Land Act*, the meanings in the *Water Act* and *Land Act* prevail.

Applicant	A person who has met the conditions of <i>STEP 2</i> of this Guide.
Application	The documentation filed under the <i>Water Act</i> and <i>Land Act</i> in accordance with <i>STEP 1</i> of this Guide.
Approve	In reference to an application for tenure to Crown land means to issue the appropriate tenure for the use of the Crown land from the application. See " <i>Grant</i> ".
Compensation	A measure to make suitable amends for an impact of a water power project, which impact cannot be practically mitigated. For example, a compensation measure for an impact on fish habitat may include the construction of comparable habitat at another location on the stream on which to project is situated.
Comptroller	Defined in the <i>Water Act</i> to mean: a person employed by the government or a government corporation and designated in writing by the minister as the Comptroller of Water Rights and includes any persons designated in writing by the minister as acting, deputy or assistant comptrollers. <i>Clarification:</i> The Comptroller has all the authority of a Regional Water Manager and Engineer, and will adjudicate applications under the <i>Water Act</i> for some waterpower projects.
Construction Engineer	A professional engineer who is retained by the holder of a water licence to supervise the construction of the works.
Dam	Defined in the <i>Dam Safety Regulation</i> to mean: (a) a barrier constructed across a stream, or (b) a barrier constructed off stream and supplied by diversion of water from a stream, for the purpose of enabling the storage or diversion of water, and includes all works which are incidental to or necessary for the barrier. <i>Clarification:</i> In section 2 of the <i>Dam Safety Regulation</i> further conditions are placed on a dam, as defined above, before the dam is subject to the regulation.
Design Engineer	A professional engineer who is retained by the holder of a water licence to supervise the preparation of plans showing the design and layout of the project and plans suitable for the construction of the project.

GLOSSARY AND ACRONYMS

Disallow	In reference to an application for Crown land means to decline the application and not issue a Crown land tenure. <i>See "Refuse".</i>
EMP	Environmental Management Plan
Engineer	Defined in the <i>Water Act</i> to mean: a professional engineer employed by the government or a government corporation and designated in writing by the comptroller as an engineer and includes a Regional Water Manager.
Environmental Management Plan	A document prepared by the holder of a water licence that sets out the manner in which the waterpower project must be constructed to mitigate the activities of construction on the environment.
Environmental Monitor	A person with the appropriate professional qualifications who is retained by the holder of a water licence to monitor the construction of the works and provide information and reports to LWBC on the compliance of the construction of the waterpower project with the EMP.
Flooding at an Intake	Land above the natural boundary of the stream that is inundated at an intake or dam, and if it is Crown land, a tenure is required for the flooding of that land .
Generating Station	A term used to describe the dam, powerhouse, tailrace and switchyard of a waterpower project, provided the dam is close coupled to the power house; and to describe the powerhouse, tailrace and switchyard of a Generating System.
Generating System	A term used to describe all components of a project where the intake is separated from the powerhouse by penstock. The term includes any dam that stores water in support of the generation of electricity, provided that the dam is not close coupled to the powerhouse.
Grant	In reference to the adjudication of an application for a water licence means to issue a licence from the application. <i>Clarification:</i> In the Guide "Grant" is used to mean "Approve" in reference to an application for Crown land.
Impact	The adverse effect of a waterpower project on environmental and social values in the vicinity of a waterpower project, and the adverse effect on persons who hold rights under the <i>Water Act</i> and <i>Land Act</i> .
Impoundment at an Intake	The volume of water impounded by an intake. <i>Clarification:</i> Flow in a stream at an intake may not be impounded at one time for the purpose of increasing power benefits at a later time. Such use of water

GLOSSARY AND ACRONYMS

	meets the definition of "storage purpose" and requires a licence, and the structure is defined as a "Dam" instead of an "Intake".
Improvements	Any physical structure on Crown land intended to enhance its value or utility or to adapt it for new or further purpose, for example, attaching permanent or semi-permanent buildings, structures, machinery or fixtures to the land.
Independent Engineer	A professional engineer who is retained by the holder of a water licence to provide information and reports to LWBC on the design and construction of the works.
Intake	An intake is any structure that takes the water from a stream and puts it into another structure that conveys the water to the place of use. The intake may impound water to create energy for the purpose of driving the water into the penstock or other conveyance structure. If the structure stores water in addition to taking water from the stream, the structure is defined as a dam. An intake may be a barrier constructed across a stream, but may not meet the other conditions necessary to be governed by the <i>Dam Safety Regulation</i> .
Interested Parties	A private individual or a group of private individuals that have a specific interest that may be impacted by the waterpower project. Examples may be a holder of a water licence, riparian owners and a society formed under the <i>Societies Act</i> .
Land and Water British Columbia Inc.	Land and Water British Columbia Inc. is incorporated under the <i>Company Act of British Columbia</i> . As a Crown corporation, LWBC operates as an agent of government to carry out activities such as issuing land tenures for Crown land and licences for the use of Crown water resources.
Licence under the <i>Water Act</i>	Defined in the <i>Water Act</i> to mean: a licence issued under this or a former <i>Act</i>. <i>Clarification:</i> A licence entitles its holder to do the following in a manner provided in the licence: • divert and use beneficially, for the purpose and during, or within the time stipulated, the quantity of water specified in the licence; • store water; • construct, maintain and operate the works authorized under the licence and necessary for the proper diversion, storage, carriage, distribution and use of the water or the power produced from it; • alter or improve a stream or channel for any purpose; and • construct fences, screens and fish or game guards across streams for the purpose of conserving fish or wildlife.

GLOSSARY AND ACRONYMS

LWBC	Land and Water British Columbia Inc.
Minister	Under the <i>Land Act</i> , the minister is responsible for the administration of all Crown land except land specifically under the administration of another minister, branch or agency of government. The minister responsible for the <i>Land Act</i> is the Minister of Sustainable Resource Management. LWBC has authorities under the <i>Land Act</i> as delegated by the minister.
Mitigation	A specification, step or procedure taken in the design or operation of a waterpower project to make milder or lessen the severity of an impact by the project.
Parties with an Interest in the Waterpower Project	Interested parties, government agencies, local government, and the public that have identified an interest that may be impacted by the waterpower project. First Nations may be an interested party or a party with an interest, but such interests are distinct from any aboriginal rights and title to the land and water resource in the vicinity of the waterpower project.
Place of use	In reference to the diversion and use of water, the place of use is the land to which the water licence is attached. For a waterpower project, the place of use of the water is the land on which the powerhouse is situated. In reference to the conveyance of electricity, the place of use is the location that is owned by the proponent where the electricity is used; or the point at which the proponents works for the conveyance of electricity connect to works owned by someone other than the proponent.
Project	Waterpower project
Proponent	An applicant or holder of a water licence and Crown land tenures for a waterpower project.
Refuse	In reference to the adjudication of an application for a water licence means to decline the application and not issue a water licence. <i>Clarification:</i> In the Guide "Refuse" also means "Disallow" in reference to an application for Crown land.
Regional Land and Water Manager	A position in the Service Centers and some Field Offices of LWBC that supervises staff. Usually the person in the position is designated a Regional Water Manager and has authority to issue tenures under the <i>Land Act</i> .

GLOSSARY AND ACRONYMS

Regional Water Manager	Defined in the <i>Water Act</i> to mean: a person employed by the government or a government corporation and designated in writing by the minister as a regional water manager and includes a person designated in writing by the minister as an acting or assistant regional water manager. <i>Clarification:</i> The Regional Water Manager has the authority to adjudicate the application for a licence under the <i>Water Act</i> for a waterpower project. The Regional Water Manager will adjudicate most water licence applications for waterpower projects. Where the Guide indicates Regional Water Manager, the Comptroller is included.
Run-of-the-River Project	A waterpower project on a stream that does not have the flow regulated a reservoir authorized by a water licence; or a waterpower project that is on a stream that does have the flow regulated by a reservoir, but the regulation is not specifically for the beneficial use of water at the waterpower project.
Storage Purpose	Defined in the <i>Water Act</i> to mean: The collection, impounding and conservation of water. <i>Clarification:</i> Usually a licence for storage purpose will support, or be appurtenant to, a licence that authorizes the diversion of water for a purpose such as power.
Storage-Supported Project	A waterpower project that makes beneficial use of stream flow regulated by a reservoir authorized by a water licence. A waterpower project that is downstream of a storage-supported project and the downstream project benefits from the regulated flow for the storage supported project, then the downstream project is also a storage supported project.
Store	Defined in the <i>Water Act</i> as: in relation to water, means collect, impound and conserve.
Tenures under the <i>Land Act</i>	A temporary permit normally authorizes: ▪ short-term use of six months to two years; and ▪ low impact use such site investigation, which require no construction or improvements. The permit gives the holder non-exclusive use to Crown land for the duration of the permit. A licence allows: ▪ carrying out of specified activities; ▪ some improvements to the land such as trails and/or the right to construct buildings; and a licence gives the holder non-exclusive access to the land. A licence cannot be registered against the land title and does not require a survey.

GLOSSARY AND ACRONYMS

A **lease** gives the tenure-holder the exclusive right to use a parcel of Crown land for a specific purpose. Leases are issued where:

- substantial improvements or investments are made in and on the land for permanent facilities; and/or
- it is necessary to define specific boundaries of an activity to minimize potential conflict with other operations.

A lease can be registered against the title of land and requires a survey of the area by the applicant prior to the issuance of a lease.

A **statutory right-of-way** is normally used to authorize linear uses of Crown land, such as pipelines, transmission lines, cables for telecommunications, etc. A right-of-way can be registered against the title of land and applicants are required to complete a survey of the area prior to the issuance of the statutory right-of-way.

Water Licence

Licence under the *Water Act*.

Waterpower Project

The totality of components that is necessary for the production of electricity at a site and the conveyance of the electricity to a place of use.

Works

Defined in the *Water Act* to mean:

- (a) anything capable of or used for
 - (i) diverting, storing, measuring, conserving, conveying, retarding, confining or using water,
 - (ii) producing, measuring, transmitting or using electricity, or
 - (iii) collecting, conveying or disposing of sewage or garbage or preventing or extinguishing fires;
- (b) booms and piles placed in a stream;
- (c) obstructions placed in or removed from streams or the banks or beds of streams; and
- (d) changes in and about a stream, and includes access roads to any of them.

APPENDICES

- Appendix A Waterpower Project Application Completeness Checklist
- Appendix B Water Licence Application Drawing Standards
- Appendix C List of offices of Land and Water British Columbia Inc.
- Appendix D Template: Waterpower Project Development Plan
- Appendix E Draft Water Licence for Hypothetical Project
- Appendix F Water Applicant's Agency Resource Guide
- Appendix G Scope of Information and Reports
to be Provided by the Independent Engineer
- Appendix H Scope of Information and Reports
to be Provided by the Environmental Monitor

Please note:

The information in the Appendices is valid at the time of publication. However, information such as the location of the offices of LWBC may change, or experience with the review of waterpower projects may improve such documents as Template: Waterpower Project Development Plan. From time to time the documents in the Appendices will be revised.

Contact Land and Water British Columbia Inc. or visit the internet site for Land and Water British Columbia Inc. for the current version of these documents at:
<http://www.lwbc.bc.ca/>

Waterpower Projects - Guide and Appendices

HELPLINE - 1-866-632-8600

[Guide for Waterpower Projects](#)  (691kb)

Appendices

- [Appendix A](#) - Waterpower Project Application Completeness Checklist  (211kb)
- [Appendix B](#) - Water Licence Application Drawing Standards  (127kb)
- [Appendix C](#) - List of offices of Land and Water British Columbia Inc.
- [Appendix D](#) - Template: Waterpower Project Development Plan  (62kb)
- [Appendix E](#) - Template: Water Licence for Hypothetical Project (UNDER DEVELOPMENT)
- [Appendix F](#) - Water Applicant's Agency Resource Guide (updated Feb 12/05)  (289kb)
- [Appendix G](#) - Scope of Information and Reports to be Provided by the Independent Engineer (UNDER DEVELOPMENT)
- [Appendix H](#) - Scope of Information and Reports to be Provided by the Environmental Monitor (UNDER DEVELOPMENT)



Land and Water British Columbia Inc.

A corporation of the government of British Columbia

Waterpower Project Application Completeness Checklist

Water licence and land tenure applications must include the items listed below (Waterpower Project applicants shall refer only to this Checklist as opposed to the Application Completeness Checklist for New Water Licence Application).

Refer to the Guide for Waterpower Projects.

Please be advised that incomplete applications will be returned to the applicant.

(Updated June 30, 2003)

APPLICATION REQUIREMENTS

Application Form ☐ Water Application Form

☐ Land Application Form (if required)

☐ Schedule 2: Dam & Reservoir Information (if required)

☐ Schedule 3: Power Information

Application Fee ☐ A cheque or money order for the water licence application must be payable to **Land & Water British Columbia Inc.**

☐ A cheque or money order for the Crown land tenure application must be payable to **Land & Water British Columbia Inc.** (if required)

Separate payment is required for a water licence application and a Crown land tenure

Maps and Plan

The maps and the plan of the works must be submitted as per the Guide for Waterpower Projects.

☐ General Location Map – at a scale of 1:250,000 to 1:50,000 indicating the location of the project, nearby towns, communities and public transportation routes.

☐ Topographic Map - at a scale of 1:50,000 to 1:20,000 and to include (as per the Guide):

- streams and tributaries affected by the project;
- all points of diversion;
- boundaries of the watershed above diversion points;
- the project components;
- all existing roads and trails;
- sites related to the construction of the project.

APPLICATION REQUIREMENTS

- ☐ Plan of the Works – at a scale of 1:20,000 to 1:5,000 and to include (as per the Guide):
- the general arrangement of the components;
 - cross section and profile of the dams;
 - total and active volumes of the storage reservoirs;
 - areas above the natural boundaries of the stream to be flooded;
 - configuration of the powerhouse, the tailrace channel and the switchyard;
 - areas required for staging construction and excavation;
 - active and inactive roads and trails, roads to be constructed or improved;
 - route and size of transmission line;
 - boundaries of all parcels of private and Crown land in the vicinity.
- ☐ **The Crown Land Application Area** – indicated with a polygon-shape outlined in red with dimensions and area to include project components on Crown land.

Certificates, Plans and Land Ownership

- ☐ **State of Title Certificates**
- ☐ **Legal Survey Plans**
- ☐ **Legal descriptions** of affected adjacent lands
- ☐ If the applicant owns the land where the water is proposed to be used, submit the certificate of Title, BC Tax Assessment Notice or **Transfer of Sales Agreement**
- ☐ If you have tenure on Crown land where the water is proposed to be used, submit a copy of the **Lease or Licence of Occupation**.

Landowner's Consent

- ☐ If the proposed pipeline or diversion works are on or will cross one or more parcels of land owned or leased by another party, submit a completed **Landowner's Consent Form** for each parcel affected.
- ☐ If such an agreement cannot be obtained indicate how access is proposed e.g., by an interim agreement or **Proof of Service Form**.

APPLICATION REQUIREMENTS

Joint Works

- ☐ If the proposed works will be connected to another licensee's authorized works, refer to **General Information on Joint Works Agreement** and submit a Joint Works Agreement.

Agency Requirements

- ☐ I have read the **Water Applicant's Agency Resource Guide**.

Preliminary Project Definition

- ☐ Summarized from the **Guide for Waterpower Projects**
- Executive Summary
 - Proponent Identification
 - Project Description
 - Capacity of Project
 - Linkages with Other Projects
 - Market for Electricity from the Project; and
 - Schedule for Completion of the Project

Certificate of Incorporation

- ☐ To be submitted if the applicant is a company



Water Licence Application Drawing Standards

Applicants are required to meet the following Drawing Standards. The application will be returned if the Drawing is inadequate.

GENERAL SPECIFICATIONS

- Use Mylar or white bond paper, preferably 8.5 by 11 inches (standard letter size) but no larger than 8.5 by 14 inches (legal size).
- Print clearly, and use black ink that does not smudge.
- Label important features. Provide a legend or key for any abbreviations used.
- Show the scale (e.g., 1:5000, 1-inch equals 500 feet, 1-cm equals 50 m).
- Ensure a North arrow is shown.

SOURCE INFORMATION

- Show the location of the source of water relative to your property boundaries and the boundaries of other landowners.
- Indicate the source by name, show the direction of flow, and if possible, indicate where the source connects to other creeks, rivers or lakes.
- Show the location and direction of flow of any natural lakes, swamps, sloughs, etc., within the general area of your application.
- Indicate the width of the source at the proposed diversion point.
- If storage is needed, show the location of the reservoir and indicate whether it will be man-made or is on a natural pond or lake.

PLACE OF USE AND PROPERTY BOUNDARIES

- Draw the legal property boundaries of the land where the water is to be used.
 - Show the boundaries of all parcels of land (both private and Crown) that will be physically affected (i.e., crossed, flooded, or used as access) by the proposed works. If any of the parcels include easements or right-of-ways, these should also be shown.
 - Identify the actual place of use, e.g., dwelling, barns, and other buildings.
-

- Clearly show the area to be irrigated with scaled measurements in hectares or acres.
- If any land is to be flooded, identify the area that will be underwater in relation to the property boundaries.

PROPOSED WORKS

- Identify the exact location of the proposed water intake or diversion structure.
- Indicate all water works, existing and proposed, e.g., the diversion structure, intake, pipe, sump, pump, dugouts, ponds, reservoirs, irrigation systems, etc.
- All works must be labeled.
- If the pipe crosses land owned by another person or the Crown, its length on that land must be shown. The pipe length must also be shown in lakes and rivers. If the bearing of the pipe is known, please include on the Drawing as well.

DRAWING PREPARATION

- Obtain a copy of a Legal Survey Plan of your property from the Land Titles Office for your area. A copy of this Plan can serve as the base map for the Drawing.
- Regional District Offices also have updated maps of land that has been subdivided. A copy of a Regional District map may also be suitable as the base map.
- Maps of various scales, including the BC Topographical series, are available at local surveying companies.
- Sample Drawings are enclosed with the application for reference.

DIGITAL DRAWING STANDARDS

Surveying companies, architectural firms and other professional drafting services may be able to provide the Drawing in digital format. An ArcInfo exportable file, an ArcInfo coverage file, and a Shape file are the only formats that meet Land and Water Management Division's digital standard for the Applicant's Drawing. Please ensure that all digital data is in Albers Projection.

ADDITIONAL INFORMATION

Please submit a copy of your Registered Survey Plan, as well as the portion of a topographical map, which covers the area of proposed water use in relation to nearby communities, highways, railways, etc.

Appendix C

Regional Offices: Service Centres and Field Offices

Lower Mainland Service Region

Service Centre - Surrey
Suite 200-10428 153rd St
Surrey BC V3R 1E1
Tel: (604) 586-4400
Fax: (604) 586-4434
Surrey - Land and Water

Field Office
Whistler-Squamish (Land)
42000 Loggers Lane
Squamish BC V0N 3G0
Tel: (604) 898-2128
Fax: (604) 898-2191
Whistler-Squamish

Surrey - Strategic Initiatives Division
Suite 200-10428 153rd St
Surrey BC V3R 1E1
Tel: (604) 586-4400
Fax: (604) 586-2900
Surrey - DMD

Northern Service Region

Service Centre - Prince George
Suite 200 1488 4th Ave (Feb 21/05)
Prince George BC V2L 4Y2
Tel: (250) 565-6779
Fax: (250) 565-6941
Prince George - Land and Water

Field Office
Fort St. John (Land & Water)
Room 370
10003 110th Ave
Fort St John BC V1J 6M7
Tel: (250) 787-3415
Fax: (250) 787-3219
Fort St. John

Field Office
Williams Lake (Land & Water)
201-172 North Second Ave
Williams Lake BC V2G 1Z6
Tel: (250) 398-4574
Fax: (250) 398-4836
Williams Lake

Field Office
Smithers (Land & Water)
PO Box 5000
3rd Floor 3726 Alfred Ave
Smithers BC V0J 2N0
Tel: (250) 847-7334
Fax: (250) 847-7556
Smithers

Southern Service Region

Service Centre - Kamloops
3rd Floor 145 3rd Ave
Kamloops BC V2C 3M1
Tel: (250) 377-7000
Fax: (250) 377-7036
Kamloops Regional Service Centre

Field Office
Cranbrook (Land & Water)
1902 Theatre Rd
Cranbrook BC V1C 6H3
Tel: (250) 426-1766
Fax: (250) 426-1767
Cranbrook

Kamloops - Strategic Initiatives Division
3rd Floor 145 3rd Ave
Kamloops BC V2C 3M1
Tel: (250) 377-7000
Fax: (250) 377-7036
Kamloops - DMD

Field Office
Penticton (Land & Water)
102 Industrial Place
Penticton, BC V2A 7C8
Tel: (250) 490-8200
Fax: (250) 490-2231

Vancouver Island Service Region

Service Centre - Nanaimo

501-345 Wallace St
Nanaimo BC V9R 5B6
Tel: (250) 741-5650
Fax: (250) 741-5686
Nanaimo - Land and Water

Shellfish Business Unit

501-345 Wallace St
Nanaimo BC V9R 5B6
Tel: (250) 741-5650
Fax: (250) 741-5686
Nanaimo - Shellfish

Template: Waterpower Project Development Plan

For the (name of stream) Waterpower Project

(April 30, 2002)

Submitted in support of applications filed under
Water Act and the *Land Act*

(This document is a **template** for use by the proponent
in the preparation of the information required for
assessing and deciding the applications.)



Applicant: (Name and address)

Date:

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PREFACE

The adjudication of applications for water licences under the *Water Act* and, where required, land tenure under the *Land Act* for a waterpower project requires information to define the project and to assess the impacts from the construction and operation of the project. The Project Definition is the information used to determine the basic conditions for any water licence or land tenure that may be granted.

The information on the assessment of the proposed project is provided to agencies for input based on their legislated responsibilities. Other water licensees, applicants for water licences, riparian owners on the stream, owners of land affected by the works and other Crown land tenure holders in the area would use the information to determine if the Project affects their rights. The assessment of the impacts of the project defines the conditions for the mitigation and/or compensation for any water licence or land tenure that may be granted.

The information requirements identified under Project Definition and Impact Assessment are important in enabling an efficient review of an application for a waterpower project and proponents are encouraged to provide complete information. Incomplete information will delay review of a project application.

The Table of Contents outlined below is the appropriate format for proponents to use when generating and submitting information on a proposed waterpower project. A description of the information required under each heading is provided for the Project Definition section according to the Table of Contents. A non-exhaustive list of potential headings is provided for the Impact Assessment section that may be adjusted to address the impacts of the individual project.

1. PROJECT DEFINITION

1.1 Decision Requested

A brief statement of the decisions required for the project. The project may require a decision under both the *Water Act* and the *Land Act*. Both decisions should be described.

Example:

Water Act Application

A water licence is required for the diversion of water from (insert name of stream) for the purpose of power.

If a water licence is also required for storage purposes provide a similar statement.

Note: Generally a water licence will not include more than one powerplant. A licence may have more than one purpose, and a powerplant may have more than one water licence.

If an existing land tenure or water licence needs to be amended for the project, the required amendments should also be described.

Other decisions required under the *Water Act* should also be described, e.g. order for joint use of works that are shared with another licensee.

Land Act Application

Tenure under the *Land Act* is required for the following components of the waterpower project:

- Insert list of components to be located on Crown land (the powerhouse, penstock, intakes and staging areas). If the type of tenure is known, use the appropriate name in the description. A list of components that may be required for a Waterpower Project is provided in the section General Arrangement of Works.
- Identify requirements for road access or road building on Crown land. Also note any requirements for public use of the road and requirements for access to lands beyond.
- Identify whether Crown land will be required for all or part of the transmission line (where known).

1.2 Description of Land Requirements

All of the Crown land and privately owned land that is required for every aspect of the project is to be described with dimensions (in meters) and area (in hectares). This includes the land on which the works will be located and any corridors that will be required for access roads (detailed road building specifications will be required by the Ministry of Forests), transmission lines, etc.

The proponent must indicate whether the various pieces of land required for the project are located on Crown or private land, and the manner in which an interest in the land is to be obtained. This interest can range from an agreement to purchase from a private landowner(s), to an application for Crown land.

The proponent should conduct a search at the Land Title Office for the correct legal description and ownership of all parcels of land required for the Project. Known Crown land encumbrances (i.e. power lines, commercial recreation activities) must be indicated. Transportation and utility corridors that may be affected should also be described.

- The land required for the project must be shown on maps and drawings as described in Step 1 of the Waterpower Project Application Guidebook.

1.3 General Arrangements of Works

The general arrangement of the project and its components must be described and referenced to the maps and drawings provided under the previous section.

Works required for a waterpower project include all those components needed to generate electricity and convey it to the user. For those projects connecting to the

provincial grid, the point of transmission line connection to the grid is the end of the works that will be licenced under the *Water Act*.

The following list may be used as a guide to the various components of a waterpower project:

- intakes on all streams to be diverted,
- canals, tunnels and natural watercourses to be used for conveying water to the intake of the penstock,
- intake of the penstock,
- penstock, powerhouse and tailrace,
- access roads required for operation and maintenance of completed project,
- switchyard and transmission lines,
- dam for the purpose of storage of water.

Note: Water impounded behind an intake is not for storage purpose, unless it changes the seasonal flow in the stream or is used for shaping the power output on a daily basis.

- area flooded by the storage or impoundment of water.

Note: An intake that impounds water above the natural boundary of the stream is considered to be flooding land, and the area of such flooded land must be identified.

- staging areas for the construction of the works,
- access roads to be used only for construction.

1.4 Parameters for Operation of Works

The parameters for the operation of the works are determined by the definition of the project, the shape and quantity of electricity to be provided by the project, and the impacts to be mitigated. The parameters are influenced by the conditions in the stream that exist at the time of the application.

Parameters determined by the definition of the project and the demand for electricity from the Project could include the following:

- The electricity is to be supplied to a customer that has a specific demand for electricity.
- The electricity is to be sold to a company that will accept the energy regardless of its shape. The storage of water at the intake during periods of low stream flow to shape the electricity to follow a particular demand during the day. Such shaping is also called load factoring.
- The operation of the waterpower plant is to be coordinated with several other powerplants to meet a demand of some specified shape. The other plants are not necessarily waterpower plants.
- The diversion of water during periods of seasonal low stream flow at the Waterpower plant is supported by storage. This storage may also be used for load factoring.

Parameters determined by impacts to be mitigated would include the impacts that are identified in section 2. Impact Assessment.

1.5 Watershed Characteristics

Describe the characteristics of the watershed that will contribute flow to the project. The climatic, topographic, slope, soils, tree-cover and other characteristics of the watershed and the Project site should be described. If available, pictures to illustrate these characteristics are helpful.

1.6 Water Availability

The information in this section is to describe the availability of water for use by the project including the following:

- Boundaries of the watershed that contributes water to the Project.
- Area – elevation curves for the contributory areas.
- The location of hydrometric and climatic stations that provide data for the analysis of water availability.
- The methodology for estimating the runoff to the points of diversion.
- Estimates of runoff should include the following:
 - ⇒ Peak flow for the design of structures
 - ⇒ Annual volume for various return periods, e.g. average, 5, 10, 20 and 50 years.
 - ⇒ Monthly volumes for each annual volume and monthly duration curves.
 - ⇒ Low flow in regard to instream flow requirements and providing water for other licensees.
- If storage is to be provided, describe the conditions for routing runoff through the reservoir and the results of the analysis.
- Location of the hydrometric and/or climatic stations used to estimate the availability of water.

The results of the analysis of the availability of water for the Project should be described and presented graphically to:

- clarify the way the Project will divert and use water, and
- understand the impacts of the Project.

1.7 Market for the Product

The *Water Act* requires the beneficial use of water as a condition of keeping a licence in current standing. The test for beneficial use of water for a waterpower project is the delivery of electricity to the user. If the user of the electricity is also the licensee, the category for determining water rentals is either "Residential" or "Commercial". For delivery of the electricity to any other user, the category is "General" for calculating water rentals.

Markets for electricity from a waterpower project could include the following:

- An individual customer, such as an industrial plant.

- A utility holding a Certificate of Public Convenience and Necessity (British Columbia Utilities Commission).
- Use by the holder of the water licence, who may be a utility, a municipality, an industry, etc.
- Export through Powerex.

The Project may be operated as a merchant plant, which means that the electricity will be sold on the open market.

1.8 Effects of Project on Rights of Others

This section should identify all owners of land, including holders of tenures on Crown land, and holders of water licences that may be affected by the Project. Discussions with these potentially affected persons should be described.

Information on water licences is available on the Internet at the following address:

<http://lwbc.bc.ca/>

Information on the status of Crown lands or information on water licences that is not obtainable from the Internet is available at offices of Land and Water BC.

1.9 Schedule for the Development of Project

The timeframe for constructing and commissioning the project should be indicated. This timeframe can be absolute if the project has an energy purchase agreement with a customer for the output of the project. Otherwise the timeframe can be relative to other factors that may affect the construction schedule, such as seasons of the year.

2. IMPACT ASSESSMENT PREFACE TO IMPACT ASSESSMENT

The impacts identified in the sub-headings of this section are not a comprehensive listing of all potential impacts of a waterpower project. Nor is every project expected to have all of the listed impacts. The proponent is expected to investigate the impacts based on the definition of the project.

Each sub-heading in this part of the development plan should include:

- A concise statement of the impact.
- The proposed mitigation or compensation of the impact.
- A summary of the data on which the assessment of the impact is based, and where a copy of the data may be obtained. Unless the volume of data is small, it should be made available separately from the Development Plan. This may be in the form of a separate paper document or in digital form.
- The standards for the collection of the data used to assess the impacts.
- Terms of reference (ToR) for additional studies if the proponent is unable to fully assess the impact.

- Sub-headings that are absent of impacts should still be included with a note explaining that no issues are present.

The proponent should always attempt to fully assess all impacts from the project. Sometimes this may not be possible because of insufficient data or the assessment of the impact requires input from agencies. In such cases, the proponent should indicate the information that is available and provide ToR for completing the assessment of the impacts. The proposed ToR will be referred to the appropriate agencies for input and finalized by the decision-maker who has jurisdiction to set conditions for the mitigation or compensation of the impact.

In addition, the decision-makers under the *Water Act* and the *Land Act* may require the proponent to provide additional information for a greater assessment of some impacts. Terms of reference for such additional information will be prepared in consultation with the proponent and the agencies that have the expertise to provide the appropriate input.

The assessment of impacts should be based on information collected in accordance with standards set by the Resources Inventory Committee (RIC). Information on the standards is available on the Internet at the following address:

<http://www.for.gov.bc.ca/ric/>

Note: The RIC standards applicable to the impacts identified in each of the following sections will be identified to the extent possible. This will be completed at a later date.

- 2.1 Instream flow for fish**
- 2.2 Wildlife and Habitat**
- 2.3 Instream flow for Recreation**
- 2.4 Flood Control**
- 2.5 Water Quality**
- 2.6 Bridges and Ferries**
- 2.7 Roads**
- 2.8 Crown Owned resources**
- 2.9 Existing Rights- Land Tenures**
- 2.10 First Nations**
- 2.11 Aesthetic Values**
- 2.12 Mineral Claims**
- 2.13 *Navigable Waters Protection Act***
- 2.14 Hazard to Public**
- 2.15 Hazard to Environment**
- 2.16 Public Access**

Water Applicant's Agency Resource Guide

INTRODUCTION

This booklet is intended to assist applicants for a water licence by describing the role of the agencies that are typically involved with water development.

Summary of Agency Responsibilities:

As part of the process of acquiring a new water licence from Land and Water British Columbia Inc. (LWBC), other government agencies have regulations that must be followed. Depending on the nature of your water use requirements, you may need to contact one or more of the agencies contained in this Guide. The following agencies may also be able to facilitate your water development activities.

For more information on LWBC, visit our web site at <http://lwbc.bc.ca>.

Aboriginal Interests (refer to page 4):

- If your proposed point of diversion is located up-stream on a water source, or is in a watershed which flows through an **Indian Reserve** it will be necessary to refer your water licence application to the **Band office**. In addition, if your works will affect (e.g. flood or cross) an Indian Reserve, your application should also be referred to the Band.
- The **Treaty Negotiations Office** of the Ministry of Attorney General can provide you with information respecting treaty negotiations in a given area, and regional LWBC staff and the **Aboriginal Relations Unit, LWBC** (250 387-6408) can also provide you with assistance respecting First Nation interests.

Agriculture, Food and Fisheries, Ministry of (refer to page 5):

- The Ministry of Agriculture, Food and Fisheries offers assistance for a wide variety of services that support the agriculture industry, such as irrigation scheduling, crop evapo-transpiration rates, soil analysis, and assistance with various efficient methods of irrigation.

BC Assessment (refer to page 5):

- If your proposed works will affect (e.g., cross or flood) private land, you will be required to notify all property owners. If your application is eligible for Quick Licensing (refer to the Quick Licensing brochure available at the LWBC website <http://lwbc.bc.ca/water/surface.html>) you will be required to obtain the written consent of each of the landowners. **BC Assessment** and the **Land Titles office** can provide information on property ownership.
-

Canadian Coast Guard (refer to page 6):

- If your proposed works will **affect navigation** (as defined in the *Navigable Water Protection Act*), contact the **Canadian Coast Guard** of the federal Department of Transportation.

Energy and Mines, Ministry of (refer to page 6):

- If you are planning to undertake mineral exploration it will be necessary to submit an application for a Notice of Work to the Ministry of Energy and Mines.
- The Ministry of Energy and Mines will advise the applicant if it is a requirement to obtain an Approval for Short Term Use of Water or a Licence from **LWBC** under the *Water Act*.
- The Mineral Exploration Code also contains direction on the protection of fish and wildlife habitat as well as the maintenance of the integrity of watercourses while undertaking mineral exploration.

Fisheries Interests (refer to page 7):

- If you propose to obtain water from a source that supports **fish life** your intake must be properly screened to prevent the passage of small fish. In addition, sections 35 and 36 of the *Fisheries Act* prohibit the deposit of any deleterious substances into waters frequented by fish, and the harmful alteration or disruption of fish habitat.
- The federal department of **Fisheries and Oceans Canada** can provide you with assistance in regard to screening water intakes and avoiding damage to fish habitat.

Forests, Ministry of (refer to page 9):

- If you plan to cut, flood or destroy timber on Crown land you must contact the Ministry of Forests for a **Forestry Licence to Cut** or, if applicable, a **Burning Permit**.
- If you propose to **construct works** within an existing forest road right of way on Crown land, you must obtain a **Works Permit** from the Ministry of Forests if the road is a Forest Service road, or negotiate an **Agreement to Construct Works** with an existing permit holder if the road is under road permit or special use permit.
- If you propose to use an existing forest road to **transport heavy equipment or materials**, you must obtain a **Road Use Permit** from the Ministry of Forests if the road is a Forest Service road, or negotiate a **Maintenance Agreement** with an existing permit holder if the road is under road permit or special use permit.
- The Ministry of Forests also issues **Grazing Permits** for livestock on Crown land. It may be necessary to obtain a Grazing Permit before a water licence application for livestock watering is filed with **LWBC**.

Habitat Management Program, Ministry of Water, Air and Land Protection (refer to page 10):

- The Biodiversity Branch of the Ministry of Water, Air and Land Protection, manages fish and wildlife habitat throughout British Columbia. Habitat Management Officers
-

can also provide you with guidance on how to protect fish and fish habitat in accordance with the federal *Fisheries Act*, the provincial *Fish Protection Act* and the Water Regulation of the *Water Act*.

Health Authorities and Ministry of Health (refer to page 11):

- The **Safe Drinking Water Regulation** describes the responsibilities of the water purveyor, which include supplying potable water to consumers, disinfecting surface water and preparing an emergency response plan.
- The **Sanitary Regulation** prescribes setbacks between wells and sources of contamination and prohibits contamination of any domestic water source.

Improvement Districts (refer to page 13):

- Before filing a water licence application you should determine whether your land falls within an Improvement District. An Improvement District may be able to supply water for irrigation as well as domestic and commercial use.

Land Title Office (refer to page 13):

- Land Title offices can confirm the ownership of private land by providing Certificates of Title as well as copies of Registered Plans. However, you may need to contact the BC Assessment office to find the up-to-date address of the landowner.

Regional Districts (refer to page 14):

- **Regional District** offices have mapping coverage that contains private land lot boundaries that will be of assistance for producing the **Applicant's Drawing** to the required standard, as part of the requirement for filing a water licence application.

Transportation, Ministry of (refer to page 14):

If your proposed works will occur within a **public road allowance**, or cross a **public road**, you must file an **application** for permission to construct works with the **Ministry of Transportation**.

Aboriginal Interests:

The province has an obligation to avoid or minimize infringements of aboriginal rights and title. In some situations the diversion, storage and use of water, or the construction, maintenance and operation of works may adversely impact aboriginal interests.

If the proposed point of diversion will be located upstream on a source or watershed that flows through an Indian Reserve the Band must be contacted. In addition, if the proposed works would affect (e.g., degrade water quality, flood or cross) any portion of an Indian Reserve, the local Band office must be contacted. In order to ensure aboriginal interests are considered appropriately, provincial organizations should consult with First Nations with regard to those interests.

If you have questions regarding water resources and treaty negotiations/aboriginal you can contact either the **Treaty Negotiations Office** or the **Aboriginal Relations Unit, LWBC** (250 387-6408).

Indian and Northern Affairs Canada represents the federal government in all treaty processes. The federal department of Indian and Northern Affairs also manages Indian Reserves under the *Indian Act*. The Legal Surveys Division of Natural Resources Canada can provide you with maps, photographs and surveys of the Indian Reserves within BC.

Web Sites: Treaty Negotiations Office
<http://www.gov.bc.ca/tno///>

Indian and Northern Affairs Canada
http://www.ainc-inac.gc.ca/index_e.html

Band Contacts
<http://www.gov.bc.ca/tno/nations/chief-and-co.asp>

Office Locations:

Ministry of Aboriginal Affairs
908 Pandora Ave.
Victoria, BC V8V 3P3
Phone: (250) 356-8281; Fax: (250) 356-0783

Mailing Address:
PO BOX 9100 STN PROV GOVT
Victoria, BC V8W 9B1

Natural Resources Canada
Legal Surveys Division
Room 800 1550 Alberni St.
Vancouver, BC V6G 3C6
Phone: (604) 666-5329; Fax: (604) 666-0522

E-mail:
Indian and Northern Affairs Canada
300 - 1550 Alberni St.
Vancouver, BC V6G 3C5
Phone: (604) 666-3931; Fax: (604) 666-3808

Agriculture, Food and Fisheries, Ministry of:

The Ministry of Agriculture, Food and Fisheries can provide guidance on both irrigation and livestock water needs.

To determine your water irrigation requirements, the range of crops, the type of soil and the area of land to be irrigated must all be considered. A peak flow rate and the quantity of water required annually for each acre irrigated (the duty) can be determined using information obtained from the "**B.C. Sprinkler Irrigation Manual**" and the "**B.C. Trickle Irrigation Manual**". These manuals also provide information on water quality requirements and irrigation system design, management and operation.

These publications are available from the **Irrigation Industry Association of B.C.** (604-859-8222).

Web Sites: Ministry of Agriculture, Food and Fisheries
<http://www.gov.bc.ca/agf/>

Irrigation Industry Association of BC
<http://www.irrigationbc.com/index.htm>

Refer to the blue pages of phone book, under Government of British Columbia for offices.

BC Assessment:

The BC Assessment can provide current information on who owns a parcel of land, based on the annual property tax assessment roll.

If you plan to use BC Assessment records to search land ownership, obtain the legal description of the property you wish to search. Your search with BC Assessment is limited to the legal description of the property in question. BC Assessment cannot be used to confirm property owners by last name.

Registered property information is also available at the Land Titles office for your area.

Although the Land Title office contains up-to-date registrations of land parcels, landowners may have changed their address or new owners may have purchased the property that you wish to search.

BC Assessment also has maps to assist you with your search. If you have an account with **BC-Online** (a Web-based access tool for various government records), BC Assessment's automated assessment searches are available to you in a variety of ways.

Web Sites: BC Assessment
<http://www.bcassessment.bc.ca/>

BC-Online
<https://www.bconline.gov.bc.ca/>

Refer to the white pages of the phone book, under British Columbia for offices.

Canadian Coast Guard:

The *Navigable Waters Protection Act* (NWP) establishes the public right of marine navigation on all the navigable waterways, including freshwater, of Canada. A "**navigable waterway**" is defined "as any body of water capable of being navigated by floating vessels of any description.."

Under the NWP **"work"** is defined as follows:

- (a) any bridge, boom, dam, wharf, dock, pier, tunnel or pipe and the approaches or other works necessary or appurtenant thereto,
- (b) any dumping of fill or excavation of materials from the bed of a navigable water,
- (c) any telegraph or power cable or wire, or
- (d) any structure, device or thing, whether similar in character to anything referred to in this definition or not, that may interfere with navigation.

Depending on the nature of your planned work, an application may need to be filed as part of the NWP Approval procedure.

Web Site: Coast Guard
<http://www.pacific.ccg-qcc.gc.ca/nwp/index.htm>

Coast Guard Office location:

Canadian Coast Guard
Navigable Waters Protection Division
Room 350 555 West Hastings St.
Vancouver, BC V6B 5G3
Phone: (604) 775-8866; Fax: (604) 775-8828

Energy and Mines, Ministry of

If you plan to carry out mineral or placer exploration you must submit a **Notice of Work** application to the Ministry of Energy and Mines. The Mines Branch will refer the application to **LWBC** and advise the applicant whether a *Mines Act* permit is required.

If the size and scope of the proposed operation is small (e.g., a hand shovel operation or diamond drill program), authorization from **LWBC** is typically not required.

However, if the proposal involves a major diversion of water or work in and about a stream (e.g., the use of a backhoe) it will be necessary to apply for an Approval for Short Term Use of Water, (which may be valid for up to 12 months) under the *Water Act*. An application for a water licence should be filed for water use that is anticipated to be longer than 1 year.

You should be also be aware of the provisions of the Mineral Exploration Code when mineral exploration is near a water source.

Web Sites: Ministry of Energy and Mines
<http://www.gov.bc.ca/em/>

Mines Act
http://www.qp.gov.bc.ca/statreg/stat/M/96293_01.htm

Mineral Tenure Act
http://www.qp.gov.bc.ca/statreg/stat/M/96292_01.htm

Mineral Exploration Code
<http://www.em.gov.bc.ca/mining/healsafe/mxready/mxcode04.htm>

Refer to blue pages of phone book, under Government of British Columbia for offices.

Fisheries Interests:

Sections 35 and 36 of the federal **Fisheries Act** prohibit the deposit of any deleterious substances into waters frequented by fish, and the harmful alteration, disruption or destruction of fish habitat.

Water main breaks that result in the discharge of chlorinated water may also constitute a violation of the *Fisheries Act*. Water purveyors should develop plans to minimize the effects of water main breaks, and avoid deliberate discharge of chlorinated water to fish bearing streams during maintenance operations.

It is advisable to contact **Fisheries and Oceans Canada** prior to initiating work in and about a water source that supports a fisheries resource.

Two publications available from Fisheries and Oceans Canada, the **Freshwater Intake End-of-Pipe Fish Screen Guideline** and the **Fish Screening Directive**, will be of assistance to you in selecting the appropriate screen for your intake.

The **Habitat Management Program** (Ministry of Water, Air and Land Protection) and BC Fisheries also manage the province's freshwater fisheries resource (refer to Habitat Management Program on page 9 of this guide).

The provincial **Fish Protection Act** identifies specific water sources which require protective measures to maintain the fisheries resource.

Web Sites: Fisheries and Oceans Canada
<http://www-heb.pac.dfo-mpo.gc.ca/default.htm>

Fisheries Act (federal)
<http://laws.justice.gc.ca/en/F-14/index.html>

Fisheries (Ministry of Water, Land and Air Protection)
<http://www.bcfisheries.gov.bc.ca/fishhabitats/fishandhabitats-conserv.html>

Fish Protection Act (provincial)
http://www.qp.gov.bc.ca/statreg/stat/F/97021_01.htm

Streamside Protection Regulation
http://www.qp.gov.bc.ca/statreg/reg/F/FishProtect/10_2001.htm

Sensitive Streams Designation and Licensing regulation
http://www.qp.gov.bc.ca/statreg/reg/F/FishProtect/89_2000.htm

Fisheries and Oceans Canada (Fish Habitat) Offices:**Bella Coola Office**

PO Box 10

Bella Coola, BC V0T 1C0

Phone: (250) 799-5345; Fax: (250) 799-5540

Campbell River Office

215-940 Alder St.

Campbell River, BC B9W 2P8

Phone: (250) 850-5731; Fax: (250) 286-5854

Clearwater Office

PO Box 610 – 1121 E Yellowhead Highway

Clearwater, BC V0E 1N0

Phone: (250) 674-2633; Fax: (250) 674-3553

Fraser Valley West Office

100 Annacis Parkway Unit 3

Delta, BC V3M 6A2

Phone: (604) 666-8266; Fax: (604) 666-7112

Duncan Office

Box 241-230 Underwood St.

Duncan, BC V9L 3X3

Phone: (250) 746-8397; Fax: (250) 746-8397

Kamloops Office

985 McGill Place

Kamloops, BC V2C 6X6

Phone: (250) 851-4950; Fax: (250) 851-4951

Lillooet Office

Box 315-879 Main St.

Lillooet, BC V0K 1V0

Phone: (250) 256-4525; Fax: (250) 256-4649

Mission Office

332873 London Ave.

Mission, BC V2V 6M7

Phone: (604) 826-3664; Fax: (604) 826-8593

Nanaimo Office

3225 Stephenson Pt. Rd.

Nanaimo, BC V9T 1K3

Phone: (250) 756-7257; Fax: (250) 756-7162

Port Alberni Office3019 4th Ave.**Port Alberni, BC V9Y 2B8**

Phone: (250) 724-0195; Fax: (250) 724-2555

Port Hardy Office

PO Box 10

Port Hardy, BC V0N 2P0

Phone: (250) 949-6422; Fax: (250) 949-6755

Powell River Office

7255 Duncan St.

Powell River, BC V8A 5M6

Phone: (604) 485-7963; Fax: (604)-7439

Prince George Office

3690 Massey Dr.

Prince George, BC V2N 3N5

Phone: (250) 627-3436; Fax: (250) 561-5534

Prince Rupert Office417 - 2nd Ave. West Suite 228**Prince Rupert, BC V8J 1G8**

Phone: (250) 627-3448; Fax: (250) 627-3480

Queen Charlotte City Office

Box 99 137 Bay St.

Queen Charlotte City, BC V0T 1S0

Phone: (250) 559-4413; Fax: (250) 559-4678

Shuswap AreaBox 1160 1751-10th Ave. SW**Salmon Arm, BC V1E 4P3**

Phone: (250) 804-7000; Fax: (250) 804-7010

Skeena Area

Box 578 3177 Tatlow Rd.

Smithers, BC V0J 2N0

Phone: (250) 847-2313; Fax: (250) 847-4723

Terrace Area Office

5235 A Keith Avenue

Terrace, BC V8G 1L2

Phone: (250) 615-5350; Fax: (250) 615-5364

Cariboo Area

310A North Broadway

Williams Lake, BC V2G 2Y7

Phone: (250) 398-6544; Fax (250) 398-8092

Forests, Ministry of:**Removal of timber**

You may cut and remove from private or Crown land timber necessary to permit construction and maintenance of works authorized under a water licence.

The cutting of any merchantable Crown timber will require a **Forestry Licence to Cut**, obtained from the Ministry of Forests district office. The Crown may retain ownership of all merchantable timber that is cut. Compensation may also be payable to the province for trees that are removed or damaged on Crown land. There may be other requirements for rehabilitation of the cut area to restore it to a productive site for growing crop trees and/or silviculture obligations such as the reforestation of any cleared trees.

There will be requirements for disposal of slash that may include piling and burning, burying or other means as determined by the forest district office. If you intend to burn slash, you must also obtain a **Burning Permit** from the Ministry of Forests.

Construction of works within the right of way of existing forest roads

If you propose to construct works within the right of way of an existing forest road, you will need to gain authorization for those works. As illustrated below in the flowchart of permit/agreement requirements for existing forest roads, you must:

- a) for a **Forest Service road**, obtain a **Works Permit** issued by the Ministry of Forests. The Works Permit will include a *Schedule of Construction Requirements* to specify conditions for construction that you must meet. The Ministry of Forests timelines to respond to a request for a Works Permit will vary depending on the complexity of your project and the scope and nature of the potential impacts. It is recommended that you submit your request at least three months in advance of the planned construction start date.
- b) for a road under an existing **Road Permit** or **Special Use Permit**, negotiate an **Agreement to Construct Works** with the permit holder. You must negotiate the terms of the agreement whereby you agree to comply with due diligence / best practices requirements to protect the safety of road users; the road and associated infrastructure; the environment, including forest resources and other social and economic values; the legal rights of the permit holder authorized to use the road for harvesting of Crown timber or other industrial purpose; and the legal rights of a forest agreement holder's operations as set out in a Forest Stewardship Plan or Forest Development Plan.

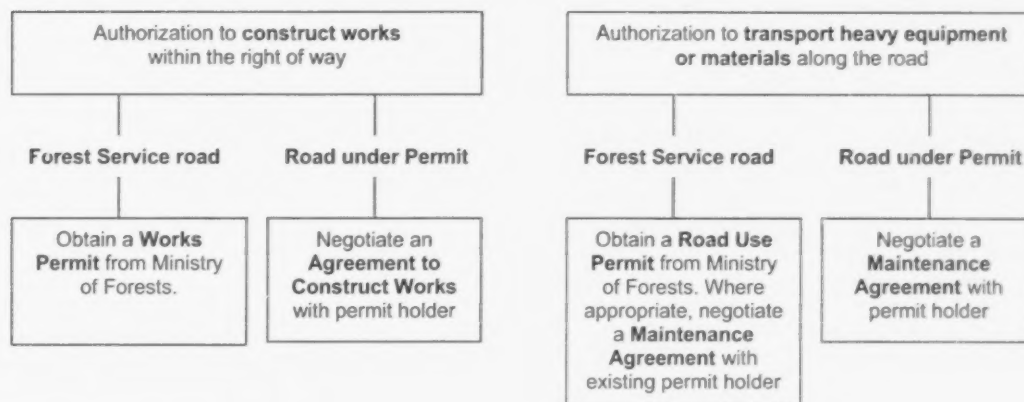
Use of existing forest roads to transport heavy equipment or materials

If you propose to use an existing forest road to transport heavy equipment or materials, you will be considered an 'industrial user' as described in Section 22.1(2) of the *Forest and Range Practices Act*. As illustrated below in the flowchart of permit / agreement requirements for existing forest roads, you must:

- a) for a **Forest Service road**, obtain a **Road Use Permit** from the Ministry of Forests.
 - If no other industrial users are currently using the Forest Service road, you should expect that the district manager will direct you to carry out all required road maintenance while you are using the road.
 - If another industrial user holds a Road Use Permit to use the Forest Service road and has been directed by the district manager to carry out road maintenance, you must also negotiate a **Maintenance Agreement** with the permit holder to pay for your fair share of the road maintenance costs;

- b) for a road under **Road Permit** or **Special Use Permit**, notify the permit holder of road use at least five clear days ahead of startup, negotiate a **Maintenance Agreement** with the permit holder, and pay your fair share of road maintenance as per the agreement.

Permit / Agreement Requirements for Existing Forest Roads



Livestock Watering

The Ministry of Forests also issues **Grazing Permits** for livestock on Crown land. In some locations in the province it may be necessary to obtain a Grazing Permit before a water licence application for livestock watering is filed with LWBC.

Web Sites: Ministry of Forests
<http://www.gov.bc.ca/for/>

Forest Act
http://www.qp.gov.bc.ca/statreg/stat/F/96157_00.htm

Forest and Range Practices Act and Regulations
<http://www.for.gov.bc.ca/code>

Forest Practices Code and Regulations— Transition Version (Pre-January 31, 2004)
<http://www.for.gov.bc.ca/tasb/legsregs/fpc/fpc.htm>

Refer to blue pages of phone book, under Governments of British Columbia for offices.

Habitat Management Program:

Habitat Management Officers (Ministry of Water, Air and Land Protection) review referrals which involve fish and wildlife habitat. Site visits are undertaken to ensure that the potential adverse affects on fish and wildlife habitats are minimized.

In addition to the federal *Fisheries Act*, Habitat Management Officers also assess proposals for work in-and-about a stream to see if they are in compliance with the provisions of the provincial *Water Act*, *Fish Protection Act* and the *Water Regulation*.

Habitat Management staff can supply guides for protecting fish and fish habitat. The booklet titled "**A Users Guide to Working In and Around Water**" (revised March 1998) is a comprehensive guide of both federal and provincial legislation for working in and around water.

Additional publications include "**Fish and Fish Habitat Protection: Best Management Practices**" available in Nanaimo for Vancouver Island, and "**Stream and the Property Owner**" and "**Lake Care: A property owner's guide to conserving fish habitat in lakes**", available in Penticton for the Southern Interior Region.

Refer to the blue pages in the phone book, under Governments of British Columbia, for the Ministry of Water, Air and Land Protection for offices.

Health Authorities and Ministry of Health

The **Safe Drinking Water Regulation**, pursuant to the *Health Act*, defines a waterworks system as being "a system of water supply including its source, treatment, storage, transmission and distribution facilities, where water is furnished or offered for domestic purposes, but does not include a water supply serving only one single family residence." This definition includes waterworks systems for restaurants and other public buildings where water is made available to the public.

Any person who intends to construct, alter, or extend a waterworks system must first obtain a **Construction Permit** from the regional public health engineer (refer to section 2). A person must also obtain an operating permit from a medical health officer or public health inspector before the waterworks system is put into use.

The Safe Drinking Water Regulation describes the responsibilities of the water purveyor, which include supplying potable water to consumers, disinfecting surface water and preparing an emergency response plan. Water purveyors must also monitor the quality of the water they provide to consumers to ensure that it meets both the microbiological standard listed in the Schedule of the Regulation and the Guidelines for **Canadian Drinking Water Quality**.

Water purveyors are required to perform water quality monitoring at the direction of the public health inspector or medical health officer. The owners of private water supplies are advised to periodically monitor their water for bacteria and chemical content.

Regional Health offices will be able to supply you with a list of accredited or approved laboratories to perform your water testing and can explain what the results of the test mean.

The **Sanitary Regulation**, pursuant to the *Health Act*, prescribes set backs between wells and sources of contamination and prohibits contamination of any domestic water source.

Health Authorities:

Capital Health Region
2101 Richmond Ave., 3rd Floor
Victoria, BC V8R 4R7
Phone: (250) 370-8699; Fax: (250) 370-8750

Northern Interior Regional Health Board
2000 15th Ave., 4th Floor
Prince George, BC V2L 3G6
Phone: (250) 565-2649; Fax: (250) 565-2640

Cariboo Community Health Services Society
540 Borland St. 3rd Floor
Williams Lake, BC V2G 1R8
Phone: (250) 398-4600; Fax: (250) 398-4249

Central Vancouver Island Health
495 Dunsmuir St., Suite 610
Nanaimo, BC V9R 6B9
Phone: (250) 755-3010; Fax: (250) 755-7353

Coast Garibaldi Community Health Services
Box 78 494 S. Fletcher Rd.
Gibsons, BC V0H 1V0
Phone: (604) 886-5600; Fax: (604) 886-2250

East Kootenay Community Health Services
1212-2nd Street North
Cranbrook, BC V1C 4T6
Phone: (250) 426-1385; Fax: (250) 426-1384

Fraser Valley Health Region
34194 Marshall Rd.
Abbotsford, BC V2S 5E4
Phone: (604) 556-5060; Fax: (604) 556-5077

Kootenay Boundary Community Health Services
813 10th St.
Castlegar, BC V1N 2H7
Phone: (250) 365-4300; Fax: (250) 365-4303

North Okanagan Health Region
1440-14th Ave.
Vernon, BC V1B 2T1
Phone: (250) 549-5714; Fax: (250) 549-5468

North Shore Health Region
231 East 15th St.
North Vancouver, BC V7L 2L7
Phone: (604) 984-3841; Fax: (250) 984-5788

Okanagan Similkameen Health Region
2180 Ethel Street
Kelowna, BC V1Y 3A1
Phone: (250) 862-4010; Fax: (250) 862-4201

Peace Liard Community Health Services
1001-110th Ave.
Dawson Creek, BC V1J 4X3
Phone: (250) 784-2400; Fax: (250) 784-2413

Simon Fraser Health Region
260 Sherbrooke St.
New Westminster, BC V2L 3M2
Phone: (604) 520-7684; Fax: (604) 520-4827

Simon Fraser Health Region
11940 Haney Place
Maple Ridge, BC V2X 6G1
Phone: (604) 466-7200; Fax: (604) 463-6057

South Fraser Health Region
10233 153rd St. Suite 300
Surrey, BC V3R 0Z7
Phone: (604) 587-4600; Fax: (604) 587-4666

Thompson Health Region
311 Columbia St
Kamloops, BC V2C 2T1
Phone: (250) 314-2784; Fax: (250) 314-2765

Upper Island Central Coast Community
Health Services
480 Cumberland Rd.
Courtenay, BC V9N 2C4
Phone: (250) 334-1140; Fax: (250) 334-1425

Vancouver & Richmond Health Board
520 West 6th Ave., Suite 200
Vancouver, BC V5Z 4R5
Phone: (604) 736-2033; Fax: (604) 775-1804

Web Sites: Ministry of Health Services
<http://www.gov.bc.ca/hlth>

Safe Drinking Water Regulation
http://www.qp.gov.bc.ca/statreg/reg/H/Health/230_92.htm

Drinking Water Program
<http://www.hlth.gov.bc.ca/protect/water.html>

Well Protection Toolkit
http://wlapwww.gov.bc.ca/wat/gws/well_protection/wellprotect.html

Improvement Districts:

Improvement Districts are autonomous local government bodies responsible for providing one or more local services for the benefit of the residents of an area. There are approximately 270 Improvement Districts in the province and they are usually located in rural areas.

Improvement Districts supply such services as domestic water supply, irrigation, dyking, drainage, fire protection and street lighting.

While Improvement Districts are independent public bodies, they are subject to supervision from the Ministry of Community, Aboriginal and Women's Services, Local Government Division.

Web Sites: Local Government
<http://www.civicinfo.bc.ca/>

Refer to the blue pages in the phone book under **Municipalities and Regional Districts or to Government of British Columbia, Ministry of Community, Aboriginal, and Women's Services, Local Government for offices.**

Land Title Office:

The following information has been obtained from the brochure titled: **"What the Land Title Office can do for You"** produced by the Ministry of the Attorney General.

In British Columbia, ownership of land, also known as land title, is registered at the Land Title Office.

To access land title records you can:

- access a Land Title Office;
- obtain a land title search from the Government Agent's Office located in BC Access Centers across the province; and
- contact private agencies - refer to "Title Services" in the yellow pages of the phone book;

Web Site: Land Title Branch
<http://srmwww.gov.bc.ca/landtitle/>

Office Locations, Land Title:**Kamloops/Nelson Land Title Office**

114 - 455 Columbia St.

Kamloops, BC V2C 6K4

Phone: (250) 828-4455; Fax: (250) 371-3717

Victoria Land Title Office

850 Burdett Ave.

Victoria, BC V8W 1B4

Phone: (250) 387-6331; Fax: (250) 356-6060

Lower Mainland Land/Prince George/Prince Rupert Title Office

88 - 6th St.

New Westminster, BC V3L 5B3

Phone: (604) 660-2595 Fax: (604) 660-4064

Prince George/Prince Rupert (call forwarded to New Westminster)

Phone: (250) 565-6200; Fax: (250) 565-4217

Regional Districts:

Regional District offices can provide maps that contain recent subdivisions of land in your area. These maps are a good source for preparing the drawing required with your application for a water licence. In addition, **LWBC** offices can accept drawings in digital format (ArcInfo export file or an ArcInfo coverage file).

In many parts of British Columbia subdivision approvals fall under the jurisdiction of the Regional District (or other local government) approving officers. Subdivision approval is subject to proof of a water supply for each parcel under the **Subdivision Regulation**, pursuant to the *Local Services Act*.

Web Sites: Ministry of Community, Aboriginal and Women's Services, Local Government
http://www.mcaaws.gov.bc.ca/lgd/pol_research/lgadvice

Regional Districts and Municipalities
<http://www.civicnet.gov.bc.ca/members/municipalities/index.shtml>

Refer to the blue pages of phone book, under **Municipalities and Regional Districts** for offices.

Transportation, Ministry of:

Any work within a public road allowance or which crosses a road will require a Permit from the Ministry of Transportation. A **Permit to Construct Work within a Highway Right-of-way** is required regardless of the size of pipe, water use or the type of road. A requirement for constructing a pipe under a road is to place the water line within a larger conduit to prevent damage from leakage. This approach will also facilitate pipe maintenance.

For many roads the pipe must be installed without digging up the traveled portion. This requirement will depend on the type of road surface and the volume of traffic. The Ministry of Transportation will be able to provide guidelines for the installation of works that affect roads and road right-of-ways.

In many parts of British Columbia subdivision approvals fall under the jurisdiction of the Ministry of Transportation approving officers. Subdivision approval is subject to proof of a water supply for each parcel under the **Subdivision Regulations**, pursuant to the *Local Services Act*.

Web Site: Ministry of Transportation
<http://www.gov.bc.ca/th/>

Refer to the blue pages of phone book, under **Government of British Columbia** for offices.

